



# ILLINOIS GAMING BOARD

## Press Release

For Immediate Release  
August 13, 2019

### Illinois Gaming Board Releases Chicago Casino Feasibility Study

**CHICAGO** – The Illinois Gaming Board (“IGB”) Tuesday released the Chicago Casino Feasibility Study. Union Gaming Analytics (“Union Gaming”) prepared the Study to address the feasibility of and ability to finance a casino in the City of Chicago. The Study is appended to this release.

Union Gaming delivered the Study to the IGB on Monday evening, August 12, 2019. As required by the Illinois Gambling Act (Public Act 101-31), the IGB delivered copies of the Study to Chicago Mayor Lori Lightfoot, Governor JB Pritzker, Senate President John Cullerton, and House Speaker Michael Madigan.

The Illinois Gambling Act further requires the IGB to make a determination within 90 days, based on the results of the Study, whether to recommend to the General Assembly that it modify the terms of the Chicago casino license as enacted in Public Act 101-31.

The IGB’s retention of a nationally recognized casino feasibility expert was required by the Illinois Gambling Act. Union Gaming was selected, with consent of the City of Chicago, following a competitive bidding process compliant with the Illinois Procurement Code. The City of Chicago will pay for the Study.

# Illinois Gaming Board

City of Chicago  
Casino Financial Feasibility Analysis

August 2019

Private & Confidential  
Union Gaming Analytics

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# Executive summary

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## Introduction

Union Gaming Analytics has been engaged by the Illinois Gaming Board ("IGB") to perform an independent financial feasibility analysis of a casino in the City of Chicago based on five potential casino sites selected for the study by the City of Chicago.

## Sites analyzed

The five sites selected for the study by the City of Chicago are as follows:

1. Harborside Illinois Port Authority Golf Course (111<sup>th</sup> St. and Bishop Ford Freeway)
2. Former Michael Reese Hospital (31<sup>st</sup> St. and Cottage Grove Ave.)
3. Pershing Road and State St. (former Robert Taylor Homes)
4. Roosevelt Rd. and Kostner Ave.
5. Former U.S. Steel Plant (80<sup>th</sup> St. and Lake Shore Dr.)

We analyze these sites herein, and also provide thoughts on incremental revenues that could be realized by placing the casino in an alternative, more tourist-friendly, area. However, the current regulatory construct, namely the highest effective gaming tax and fee structure in the US, makes any casino project – regardless of location – generally not financially feasible.

As part of our analysis we made visits to all five of the sites selected for the study by the City of Chicago to better understand them from an ingress/egress perspective, as well as to get a better sense for the immediate surrounding areas and how this might impact our projections.

## Other new supply in Chicago area will compete for the same customers

All analyses herein have assumed that all components of the recently enacted gaming expansion bill that could potentially have an impact on a casino in the City of Chicago will come to fruition. This increase in gaming supply will generally have an adverse impact on potential gaming revenues for a casino in the City of Chicago as much of this increase in gaming supply will be competitive from a geographic perspective and thus will compete for many of the same customers. The elements contemplated in our analyses include, but are not limited to:

- A new casino in Cook County (Bloom, Bremen, Calumet, Rich, Thornton, or Worth)
- A new racetrack casino in Cook County (Bloom, Bremen, Calumet, Orland, Rich, Thornton, or Worth)
- A new casino in the City of Waukegan
- The addition of 1,200 gaming positions at Arlington International Racecourse and Hawthorne Racecourse
- An expansion of the number of gaming positions at the existing Illinois casinos
- An expansion of the number of video gaming terminals allowed to be operated by terminal operators

Other elements of the gaming expansion bill that will not have a measurable impact on a casino in the City of Chicago from a competitive perspective include:

- A new casino in the City of Danville
- A new casino in the City of Rockford
- A new casino in Williamson County

## **Not feasible due to the onerous tax and fee structure**

The gaming expansion legislation that allows for a casino in the City of Chicago is very onerous from a tax and fee perspective. Our understanding is that on top of the existing tax structure on Adjusted Gross Receipts ("AGR") paid by all Illinois casinos, the City of Chicago casino would also pay an additional 33 1/3% privilege tax on AGR. The developmental impact of high taxes and fees notwithstanding, we forecast that a casino in the City of Chicago has the potential to become the highest grossing casino in Illinois, significantly higher than the current market leading Rivers Casino in Des Plaines, which generated \$441.8 million in AGR in calendar 2018. For example, the highest AGR potential for the five sites selected for the study by the City of Chicago is approximately \$806 million (Former Michael Reese Hospital, 31st St. and Cottage Grove Ave.). Based on the prevailing AGR and admissions taxes alone (set aside for the moment other operational-phase taxes and fees), a casino in the City of Chicago would pay approximately \$311 million in AGR and admissions taxes, or an effective rate of approximately 39% relative to AGR of \$806 million. When combined with the 33 1/3% additional privilege tax on AGR specific for the City of Chicago casino, the effective tax rate is approximately 72%. AGR projections for all of the five sites result in a broadly similar effective tax rate.

It can be further expected that a casino's operating expenses (e.g. advertising, marketing, payroll, rent, utilities, etc.) can easily approach the equivalent of 30% of AGR, if not higher. Combined with the effective tax rate of 72% yields an expense structure that could exceed casino revenue. *Ultimately the additional privilege tax on AGR specific to the City of Chicago results in none of the five sites being financially feasible. The amount of profit generated relative to total development costs, inclusive of licensing and reconciliation fees, represents at best a 1% or 2% return annually, which is not an acceptable rate of return for a casino developer on a greenfield project.* But for this incremental tax, any of the sites analyzed herein would likely have a profit margin broadly in line with the Illinois and regional casino peer group average in the low-to-mid 20% range. However, we believe a reasonable casino developer would not move forward with a greenfield casino project that has, at best, a low single digit profit margin.

To the extent a casino operator could pare down expenses and realize modest revenue and profits from non-gaming amenities (as we have projected herein), total enterprise profit margin would, in a best-case scenario, likely equate to a few pennies on the dollar – and that would require the casino to be developed without incurring any debt as we believe no traditional financing would be available for such a development as debt servicing would likely well exceed any modest profits generated.

Under a scenario where an operator generates a low-single-digit profit margin as detailed herein for some of the five sites, cumulative operating profits vanish (along with any profits generated while operating a temporary casino during the construction phase) when contemplating the reconciliation fee equal to 75% of AGR for the most lucrative 12-month period of operations that is to be imposed after three years of operation. For example, and ignoring any monies paid as part of an RFP bid and license issuance fees, the highest grossing casino of the five sites analyzed herein would also pay reconciliation fees (effectively a backwards looking license fee) of:

- \$15 million license reconciliation fee
- \$120 million in per position fees (4,000 positions x \$30,000 per position) under the assumption all 4,000 positions are utilized
- \$502.6 million reconciliation payment
- TOTAL \$637.6 million (or \$622.6 million if the initial \$15 million license reconciliation fee can also be offset similar to the \$120 million in position fees)

The reconciliation fee alone would wipe out any profits generated for many years, if not decades under the AGR tax structure. The return on investment profile for all five sites is subpar, if not negative over the five years projected herein. *Therefore, the reconciliation fee for a casino in the City of Chicago not only magnifies the lack of feasibility, it also shuts the door on the ability of the developer to obtain financing under the context of the AGR tax structure that results in a barely-profitable casino at best.*

### **Casino profit margins can't support the special privilege tax**

Noted above, it is not unreasonable to think that the operating expenses of a casino in Illinois could approximate 30% of AGR or higher. By way of example, and while Illinois casinos are not required to report detailed financial information publicly, we were able to calculate various financial margins for the Grand Victoria in Elgin that was recently sold. Based on press releases provided by the acquiring company, 2017 EBITDA was calculated to be approximately \$36.4 million. Based on data available from the IGB, the casino generated \$168.7 million in AGR in 2017 and paid \$55.5 million in gaming and admissions taxes and fees. With these data points available, operating and other expenses can then be estimated at approximately \$76.9 million, or 46% of AGR (and well above the 30% estimate above).

We have also analyzed EBITDA margins on net revenue across a portfolio of the largest regional casino operators in the US and found that, on average, EBITDA margin was 22.9% over the last six years. This portfolio touches most gaming jurisdictions in the US, many of which have a lower effective AGR tax rate than Illinois yet EBITDA margin is still in the low-to-mid 20% range. Ultimately, when an AGR tax is towards the lower end of the spectrum a casino operator tends to incur more marketing expenses in order to remain competitive with its nearby peers. Conversely, when an AGR tax is high, marketing expenses tend to be lower so that a casino operator can maintain profitability.

**Figure 1: Regional casino operator EBITDA margins, 2013 to 2018**

	2013	2014	2015	2016	2017	2018	Avg.
Boyd Gaming Corporation	19.8%	20.7%	22.6%	23.3%	23.5%	23.0%	<b>22.1%</b>
Caesars Entertainment	19.5%	16.6%	18.4%	17.2%	23.9%	23.4%	<b>19.8%</b>
Eldorado Resorts Inc	19.8%	14.1%	17.9%	18.2%	21.1%	24.2%	<b>19.2%</b>
Penn National Gaming, Inc.	25.8%	26.2%	26.9%	26.9%	26.3%	28.2%	<b>26.7%</b>
Monarch Casino Resort Inc.	25.0%	21.5%	24.0%	24.9%	24.2%	23.9%	<b>23.9%</b>
Pinnacle Entertainment Inc	24.1%	25.8%	26.0%	25.8%	26.2%	na	<b>25.6%</b>
<b>Average</b>	<b>22.3%</b>	<b>20.8%</b>	<b>22.6%</b>	<b>22.7%</b>	<b>24.2%</b>	<b>24.5%</b>	<b>22.9%</b>

*Source: Union Gaming Analytics, FactSet Research Systems*

Regardless, the metric that is the most relevant here is the EBITDA margin in the low 20% range, not just for Illinois but for gaming in general across most of the U.S. We believe that most Illinois casinos generally operate in this range and we would generally expect a casino in the City of Chicago to also be in the same range – but for the additional privilege tax of 1/3<sup>rd</sup> of AGR. When contemplating the additional City of Chicago privilege tax, a casino in the City of Chicago could have a negative operating profit based on the assumption that its operating costs are broadly similar to those of the existing casinos in Illinois. Keep in mind that the Chicago metropolitan area market is very competitive and all of the nearby gaming facilities would be operating at a significant advantage to a Chicago casino in that they would not be faced with the special privilege tax on AGR. In order to generate the levels of AGR we have projected for the five sites, a Chicago casino would have to have at least a broadly similar marketing budget (expressed as a percentage of AGR) as the peer group, which in turn would likely result in negative operating profits for a Chicago casino.

### **The absence of the special privilege tax would yield a profitable casino**

Our analyses suggest that, at best, the highest earning of the five sites would operate on very thin profit margins of around 3%, which compares very unfavorably to the in-state and regional peers in the low-to-mid 20% range. In the absence of the special privilege tax on AGR specific

to Chicago, the profitability of a casino in the City of Chicago would receive a material boost. While not all of the tax “savings” would drop to the bottom line in the event the special privilege tax is rescinded, most of it would. In this scenario, and while the casino would certainly allocate some of the savings to, for example, increased marketing efforts, the lack of the special privilege tax would allow a casino to operate with margins broadly in line with the in-state peers. For the Michael Reese site, an EBITDA margin in the low 20% range would result in EBITDA of approximately \$200 million in 2024. Purely from a profit generating standpoint, a casino project that generated EBITDA margins in the 20% range would be attractive to many major casino developers as it would likely yield a sufficient return on investment.

## **Financial projections by site**

All sites were analyzed based on a common set of assumptions. Namely that any given casino development would include up to 4,000 gaming positions in addition to common elements of casinos found elsewhere in Illinois and throughout the United States. As directed by the City of Chicago, we included the following common casino elements: a modestly sized mid-tier hotel (up to 500 rooms), MICE space, sufficient food and beverage outlets, and some space dedicated to entertainment. All estimates herein are presented in 2019 dollars and reflect optimized casino performance that assumes a one+ year ramping period to reach stabilized revenue and cash flow. We use a one-year ramping period herein for illustrative purposes, although it is possible the actual ramp could potentially take longer than one year.

We have assumed that the casino licensee RFP is completed and a license issued by late 2020, which would then be followed by a two-year construction cycle with the casino opening on or about January 1<sup>st</sup>, 2023. Given the illustrative one-year ramp period, we would largely expect 2024 to represent stabilized revenue and cash flow.

Further, and while the different sites selected for the study by the City of Chicago certainly have varying land values, differences in land valuation were not contemplated herein. We asked for but did not receive land valuation analyses for the five sites. Regardless, we have assumed herein an approximate all-in development cost of \$750 million, inclusive of:

- Hard construction costs
- FF&E
- Land acquisition
- Project management
- Pre-opening expenses

We believe \$750 million is reasonable, if not at the low-end of the likely range for a modest casino with the up to 4,000 gaming positions and non-gaming amenities listed above. For comparison purposes, Rivers Casino Des Plaines was developed for approximately \$450 million without a hotel. Given the effect of inflation, that the casino in the City of Chicago will be larger from a gaming position standpoint, and that it will include a 500-room hotel, \$750 million is likely the bare minimum all-in development cost. It should be noted that in the event of an even higher development cost, financial feasibility deteriorates even further. For comparison, we note that Encore Boston Harbor (detailed elsewhere in this report), which is broadly similar in terms of the number of gaming positions and the number of hotel rooms, had a development budget of approximately \$2.6 billion, while MGM National Harbor, which is smaller in terms of gaming positions and hotel rooms, had a development budget of approximately \$1.4 billion. The delta in development costs between these projects and our \$750 million assumption for the City of Chicago can primarily be attributed to the fact that these markets have significantly lower effective gaming tax rates, lower license fees, and much less competition. Therefore, a developer has more incentive to build a higher quality facility as the return on investment potential is significantly higher.

The analyses resulted in estimated gaming revenues for all sites, in addition to estimated non-gaming revenues based on the amenities noted above. Under a set of assumptions on operating expenses via a set of comparable benchmarks, EBITDA was estimated for each site. EBITDA, or earnings before interest, tax, depreciation and amortization, is the most common metric used by both the investment community and casino developers to evaluate casino operating performance.

The following table highlights the AGR, total property net revenue, and EBITDA estimates for the five sites. The estimates are for the year 2024 and represent the first full year of stabilized operations after an illustrative one-year ramping period.

**Figure 2: Revenue and EBITDA, by site (2024, \$mm)**

	Harborside	Michael Reese	Pershing Road	Roosevelt Road	U.S. Steel Plant
Adjusted Gross Receipts	689.9	805.9	781.6	697.9	652.7
Net Property Revenue	764.3	884.1	859.0	772.5	725.9
EBITDA	2.4	27.1	21.5	2.7	-6.1

*Source: Union Gaming Analytics*

## Ability to finance a casino

Based on the revenue and EBITDA projections for each site, in addition to the backwards looking reconciliation fee equal to 75% of the casino's highest 12-month AGR (amongst other fees that effectively inflate the all-in cost to roughly double the \$750 million development cost), the return on investment profile of the project is subpar, if not negative over the five years projected herein. Therefore, a casino development in the City of Chicago would not be able to obtain financing from traditional sources.

Current market trends would generally suggest the following financing requirements and details for an already well-known gaming company with a sound balance sheet:

- 40% to 50% equity contribution
- Maximum leverage of 5x to 6x steady-state EBITDA
- Interest rate of approximately 9% to 10% for a greenfield development

If a developer were to approach a lender and seek to finance 55% of the project (the midpoint of the expected range of 50% to 60% debt mix for the project), this would equate to a loan of nearly \$800 million under the highest earning of the five sites. We calculate this loan amount based on expectations of a \$750 million development cost, in addition to the license reconciliation fee and per position fees that would have to be wrapped into a financing package as the casino would not be able to fund these fees out of operating cash flows. However, the annual debt service on this hypothetical loan would notably exceed cash flows (and thus fail the maximum leverage test). Therefore, a lender would not extend financing for this project.

Alternatively, a developer could approach a lender and seek financing while staying within the leverage limit of 5x. Based on EBITDA of approximately \$27 million (under the highest grossing site), the developer could seek no more than \$135 million of debt. This would then require the developer to obtain approximately \$1.3 billion in equity financing. However, this scenario results in a decidedly negative return on equity as cash inflows in the form of profits are vastly outpaced by outflows in the form of development cost, license-related fees, and debt service. This scenario would not make sense from the point of view of an equity investor, and lenders would generally be unwilling to provide financing for a project with such an equity return profile.

## Removing the special privilege tax on AGR should make a difference

If the special privilege tax on AGR is removed and a casino site begins to generate healthy profits, for example \$200 million in EBITDA at the Michael Reese site, it is likely that a casino developer could obtain debt financing for such a project even when facing the reconciliation payment after three years of operation. We explore this concept in greater detail herein.

## Alternative structure – a City-owned casino

Rather than the current structure that includes the City of Chicago privilege tax on AGR in addition to the reconciliation fee, a structure that allows the City of Chicago to capture the majority of profits of a casino can be achieved. In this case a municipally owned casino, managed by a third-party casino operator, could make sense. The casino could potentially be financed by municipal bonds, for example, with the City of Chicago capturing cash flows less debt service, casino management fees, and any other receipts shared with, for example, the county or state.

## Cannibalization of Indiana casinos

Based on the five sites selected for the study by the City of Chicago, we estimate that up to \$260 million in AGR will be repatriated back to Illinois. This consists of approximately \$162 million in slot AGR and \$98 million in table games AGR.

**Figure 3: Cannibalization of Indiana gaming revenue, 2024**

	Revenue cannibalized (in \$mm)
Slots	(162.1)
Tables	(97.5)
<b>Total</b>	<b>(259.7)</b>

Source: Union Gaming Analytics

## Tax and fee generation

A casino in the City of Chicago would create significant fee and tax receipts for the City, County, and State. The largest contribution would come in the form of the two AGR taxes, namely the existing casino graduated AGR tax and then the City of Chicago privilege tax that is equal to 1/3<sup>rd</sup> of AGR. In addition to this, we have estimated casino admissions taxes, various sales taxes related to the non-gaming elements of the casino, and other taxes such as the Cook County annual slot machine tax. While we attempted to be as comprehensive as possible, there are other taxes, for example property taxes, which are impossible to quantify today. Based on our 2024 projections for stabilized operations, annual taxes and fees should range between \$482 million and \$598 million depending on site.

**Figure 4: Tax impact of a casino in the City of Chicago**

	2024				
	Harborside	Michael Reese	Pershing Road	Roosevelt Road	U.S. Steel Plant
<u>Taxes (\$mm)</u>					
AGR Tax	246	293	284	251	232
City of Chicago AGR Privilege Tax	230	269	261	233	218
Casino Admissions Tax	15	18	17	15	14
Cook County Slot Machine Tax	4	4	4	4	4
Hotel Tax @17.4%					
To State @6%	2	2	2	2	2
To City @11.4%	4	4	4	4	4
F&B Tax @10.5%	5	5	5	5	5
Amusement Tax @9%	3	4	4	3	3
<b>Total Taxes</b>	<b>509</b>	<b>598</b>	<b>580</b>	<b>517</b>	<b>482</b>

Source: Union Gaming Analytics

In addition, we estimate the following one-time license-related fees to be generated, by site. Note that the reconciliation payment as depicted below subtracts the fee per position but does not subtract the original \$15 million license reconciliation fee.

**Figure 5: One-time fees of a casino in the City of Chicago**

	2024				
	Harborside	Michael Reese	Pershing Road	Roosevelt Road	U.S. Steel Plant
One-Time Fees (\$mm)					
License Application Fee	0.25	0.25	0.25	0.25	0.25
Background Investigation Fee	0.05	0.05	0.05	0.05	0.05
License Issuance Fee	0.25	0.25	0.25	0.25	0.25
License Reconciliation Fee	15	15	15	15	15
Fee Per Position	120	120	120	120	120
Reconciliation Payment (less Fee Per Position)	413	503	484	419	384
<b>Total One-Time Fees</b>	<b>548</b>	<b>638</b>	<b>619</b>	<b>555</b>	<b>520</b>

*Source: Union Gaming Analytics*

## Airport slots

In each scenario, optimal AGR is achievable without the need to deploy all 4,000 available positions. We estimate there will be 500 slots available that could be deployed at O'Hare and Midway airports. We have assumed a win per day on these slots of \$200, which compares favorably to Nevada – the only comparable market that also has slot machines within airports. Based on an assumed win per day of \$200, AGR at the airports could reach nearly \$37 million.

## Incremental AGR from more tourist-centric location

Noted herein, we do not believe any of the five sites are financially feasible under the tax and fee structure recently enacted. Further, none of the sites are ideal from the standpoint of maximizing AGR and therefore maximizing tax receipts. In order to achieve optimal AGR and tax receipts, the casino should be located in a tourist-centric location that also enjoys, if possible, decent access to the local population. Such a facility could likely generate more than \$350 million in incremental AGR relative to the highest performing of the five sites at approximately \$806 million in AGR. While this amount of AGR would be attractive, the reality is that such a casino would also likely fail the financial feasibility test as the math behind the special privilege tax and reconciliation fee would result in an enterprise that would have thin profit margins at best and would likely also have a subpar, or even negative return on investment when also contemplating what should be a significantly higher development cost than \$750 million.

The incremental AGR that could be generated at a casino in a more tourist-centric location would be driven by two primary categories of customer. The first is represented by persons staying at a hotel in close proximity to the casino and who, as part of their trip to Chicago, would spend some amount of time in the casino. This cohort could contribute more than \$150 million in AGR, although on a net basis likely closer to \$100 million after adjusting for a lower AGR contribution from area residents who might find it harder to reach a casino in a more tourist-centric location. The second category is represented by persons actually staying at the casino hotel itself, which might have well more than the baseline of 500 rooms. The addition of incremental hotel rooms would allow a casino to host more higher value gaming customers, which in turn would drive higher AGR. While the amount of hotel-driven AGR could vary widely based on the number and quality of rooms available, we estimate there could be an incremental \$250+ million in AGR as a result. Combining these two categories, a casino in a more tourist-centric location could yield \$350+ million in incremental AGR relative to the highest grossing of the five sites.

## Macro thoughts

### How much can a market grow before it begins to cannibalize itself?

A well-served gaming market can be thought of as a metropolitan area where most residents live within close proximity of a casino. In these markets, the percentage of income typically allocated to gaming is approximately 1%. As casino supply increases in an already well-served market, the percentage of income allocated to gaming generally begins to stabilize, with the pie beginning to see a division into smaller pieces (i.e. cannibalization) rather than continuing to grow materially.

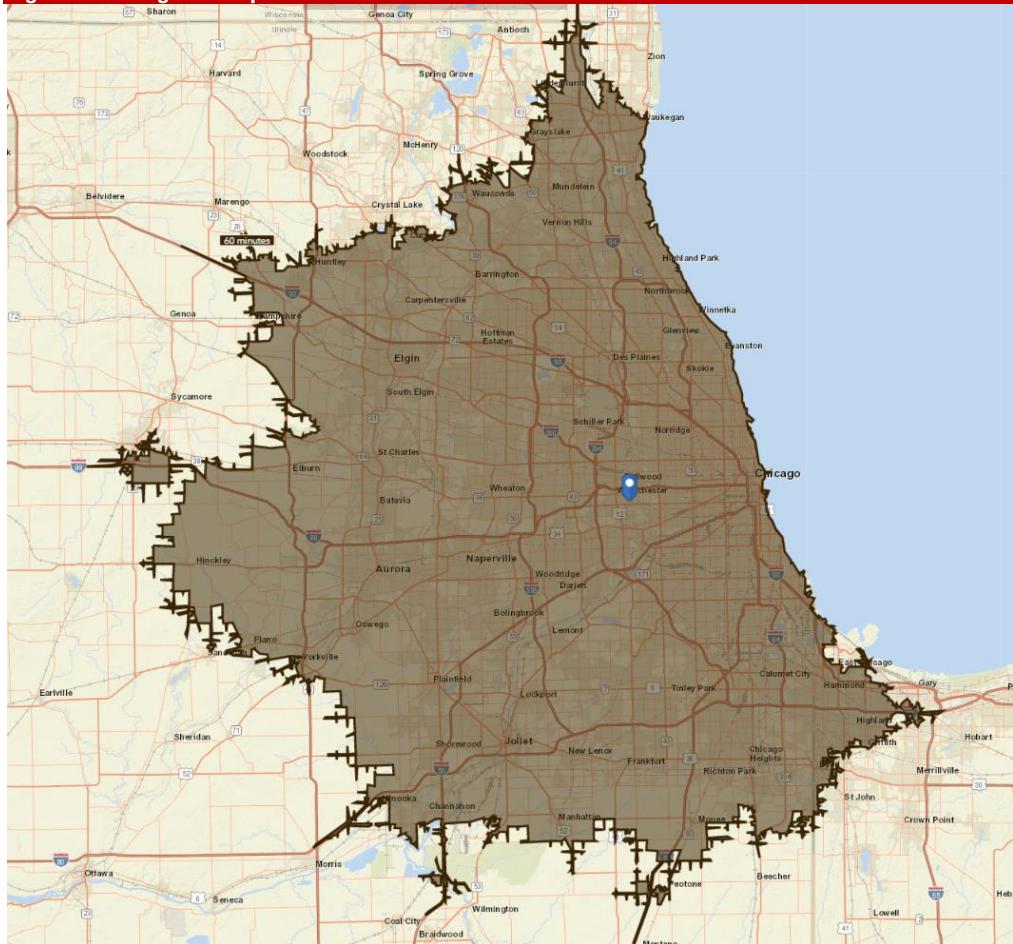
A good example of a well-served market that also happens to be relevant from a geographic perspective is St. Louis. The St. Louis market – with the metro area spanning both Illinois and Missouri – is generally well-served in terms of casino supply and the percentage of income allocated to casino gaming is approximately 1.1%. By way of comparison, we estimate the Chicago metro area allocates just 0.6% of income to casino gaming, inclusive of casinos in the Chicago area (IL and IN). This suggests there is significant upside potential in terms of total gaming revenue that can be supported by the Chicago metro area as supply is added throughout the market. If, for example, the Chicago metropolitan area reaches 1% of income allocated to casino gaming, total gaming revenue would reach approximately \$3.0 billion, or 76% higher than 2018's \$1.7 billion.

Figure 6: Benchmark gaming jurisdictions and income allocations within 60-minute drive						
	Detroit	Kansas	St. Louis	Pittsburgh	Philadelphia	Chicago
<b>AGR (\$mm)</b>	\$1,444.1	\$701.9	\$1,034.0	\$636.0	\$1,294.5	\$1,788.0
<b>Population</b>	4,603,150	2,438,463	2,743,836	2,352,223	6,008,659	8,239,603
<b>Per Capita Income</b>	\$29,768	\$32,815	\$33,895	\$33,691	\$36,149	\$36,962
<b>% of Per Capita Income Spent on Gaming</b>	<b>1.1%</b>	<b>0.9%</b>	<b>1.1%</b>	<b>0.8%</b>	<b>0.6%</b>	<b>0.6%</b>

Source: Union Gaming Analytics, company data, ESRI

With the above in mind, the recently enacted gaming expansion legislation should go a long way towards the Chicago metro area reaching its full potential in terms of gaming revenue. However, it is important to consider that it is not only the amount of gaming supply that matters, but the quality and location as well. To that end, not only does the recently enacted legislation introduce even more gaming supply to the south of the City of Chicago in the form of a casino in south suburban Cook County and a south suburban racetrack casino, there is existing gaming in the form of casinos in Aurora and Joliet, and multiple casinos in northwest Indiana that serve residents either living on the south side of Chicago or the southern / southwestern suburbs of Chicago. Conversely, there is limited gaming supply to the west of Chicago and only modest supply to the north/northwest (although the addition of gaming to Arlington Racecourse will represent the third casino to the northwest). Therefore, based purely on geography, a more centrally located casino within the City of Chicago should result in greater gaming revenue generation and less cannibalization of existing properties than any of the five sites we were directed to analyze herein.

**Figure 7: Chicago metropolitan area 60-minute drive time**



Source: Union Gaming Analytics, ESRI

## **Increasing the number of gaming positions does not translate into linear gaming revenue growth**

Touched on above, just because new gaming supply is introduced to a market does not mean that market revenue will grow. Some reasons for this include existing supply already serving the same market, or that new supply introduced is not of sufficient quality. As a result, just because the number of gaming positions increases by a certain percentage does not mean that gaming revenue will grow by the same percentage. Further, the same principle holds true for an individual casino. Just because a casino generates, say \$300 of gaming revenue per position per day, does not mean that every incremental gaming position added to the casino floor will also generate the same \$300 while not depressing gaming revenue per day on the existing slot machines. To that end, and location and quality notwithstanding, it is likely that the 4,000 gaming positions approved for a casino in the City of Chicago will likely be better utilized in a scenario where the machines are not allocated exclusively to the casino but also to Chicago's two airports.

## **Impact of traffic**

Simply put, gaming has largely grown to be a convenience-based pastime, rather than a destination-based pastime (i.e. Las Vegas) given the proliferation of casinos throughout much of the US. As such, casino customers tend to patronize whichever casino is located nearest to them. In a market that is well-served or over-served, patrons often have a choice in where to spend their gaming dollars. In the context of four of the five sites being located on the south side and therefore potentially creating a situation of over-supply when considering other existing and planned gaming development, traffic conditions could have an effect on the ability of a casino to achieve optimal revenue. We have made modest adjustments to the ultimate revenue generating potential of the sites discussed herein to account for traffic. Our adjustments were modest as peak revenue generating hours at a casino generally occur in the evening hours midweek, and during the weekend, and therefore would generally occur after rush hour. However, we would encourage the City of Chicago and any potential casino developer to perform more detailed traffic analyses on the chosen sites to better gauge how everyday traffic patterns might impact gaming revenue.

## **Positive impact of hotel rooms**

Hotel rooms at a casino generally have a significantly positive impact on gaming revenues. This is because hotel rooms allow for a casino to keep higher-value customers on property for longer periods of time, allow for a casino to attract local guests from further afield (i.e. beyond a typical catchment area), and allow for a casino to attract tourists. We were directed to include a hotel component to a City of Chicago casino as part of our analysis, with a target of approximately 500 rooms and of standard quality. While we do believe these parameters will result in higher gaming revenues than if there were no associated hotel, a larger positive impact would be realized if the location is more tourist-friendly, and if the hotel is of 5-star quality. It is important to note that gaming has become a very competitive industry and top players have come to expect high quality lodging benefits in order to win their business.

## **The impact of tourism (why a casino needs to be located in already tourist-friendly areas if tourist visitors are desired)**

Only a centrally located casino that is in close proximity to high-quality hotels and other notable tourist attractions will be able to meaningfully penetrate the robust tourism trends the City of Chicago already enjoys. Put another way, tourists generally will not patronize a casino in an area that is inconvenient relative to where they are staying or perceived as unsafe, nor will tourists be eager to book a room at a casino's hotel if there are no other easily accessed attractions nearby. For these reasons and more we would not expect a material number of tourists to patronize any of the five sites analyzed herein. Instead, these sites will primarily draw patrons from persons living within close proximity.

In addition, it is important to note the proliferation of casinos on a nationwide basis. As such, it is increasingly difficult to attract out-of-market visitors to a casino as it is no longer a unique proposition. Most customers will simply patronize a casino in their home market unless a casino is of very high quality, in close proximity to other attractions, and is in an attractive location. Unfortunately, none of the five sites analyzed herein fully meet the last two considerations of being in close proximity to other attractions and having an attractive location.

## **Urban Las Vegas Strip style casino resorts**

Most historical casino development has occurred outside of major metropolitan areas, or, to the extent casinos have been built in major metropolitan areas they have been encumbered by factors such as being expansions of existing racetracks and/or punitive tax rates (New York City), and as such do not resemble a typical Las Vegas Strip casino. However, Wynn Resorts in June 2019 opened the first Las Vegas Strip style casino resort in the heart of a major urban area, Encore Boston Harbor.

- Cost: \$2.6 billion (inclusive of construction, land, \$85 million license fee, capitalized interest, pre-opening expenses)
- Casino: 210,000 square feet, including 3,158 slots, 143 table games and an 88-table poker room
- Hotel rooms and suites: 671
- F&B venues: 15
- MICE space: 50,000 square feet
- Spa
- Various other non-gaming amenities
- Tax rate: 25% on all gaming revenue
- Very close proximity to major tourist attractions, the financial district, and Boston Logan International Airport

Consensus Wall Street estimates are for total resort revenue of \$833 million and EBITDA of \$207 million in the property's first full year of operations in 2020, growing to \$929 million and \$252 million in 2021<sup>1</sup>. The company, as per its recent investor presentation anticipates \$1.0 billion in total resort revenue and \$275 million in EBITDA as its base case forecast after a 36-month ramp period. This would imply a modest return on investment when comparing EBITDA to total development cost. Most casino developers will expect EBITDA to reach at least 15% of total development cost as the benchmark that satisfies the decision to move forward with any given project, although there are other factors, such as the ability to cross market other properties in locations like Las Vegas and Asia, that are positive factors for the casino developer yet are difficult to quantify herein.

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<sup>1</sup> Source: FacSet Research Systems, 8/9/2019

Chicago has been presented with a rare opportunity to be home to the second such Las Vegas Strip style urban casino in a major metropolitan area. However, we believe that most, if not all, developers with such a project in mind would have limited interest in the five sites selected for the study by the City of Chicago given the difficulties associated with attracting higher value patrons (including international patrons) to a non-central location that does not offer a significant number of other attractions in the immediate (i.e. walkable) vicinity. As such, to the extent there are any proposals from casino developers that approximate a Las Vegas Strip style casino resort we would expect the location to be more centrally located in close proximity to existing tourism infrastructure, or at least skewed in a direction that is less penetrated with existing and future casino venues than the areas to the south of Chicago. We would also expect any such proposal to be dependent on either material changes to, or abatement of, the City of Chicago privilege tax of 1/3<sup>rd</sup> of AGR, and potentially the backwards-looking reconciliation fee.

# Modeling

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## Gravity model

The forecasts herein rely in part on our proprietary gravity model. It can help identify which casinos are stronger competitors, while providing insights into how the market might react if the competitive dynamics are changed. Such changes could include additional casinos added to the market, existing casinos expanding their gaming supply, regulatory changes allowing new games or wagering limits, or an existing casino undergoing an upgrade that makes it more attractive to its patrons.

The foundation of our gaming revenue model is the relationship between an individual's distance from a casino and their anticipated spending at that casino. The closer the distance, the higher the expected gaming spending becomes. This relationship is the basis for gravity modeling, which is the industry standard in regional casino analyses.

Through our experience producing gaming market studies and forecasting revenue, we have accumulated a large set of casino customer data points. This data contains such information as the number of customers enrolled in a casino's rewards program by zip code, as well as the gaming revenue contribution of each customer. Other data points can include greater detail about the number of trips taken by each customer, which allows us to calculate gaming spend per trip. We have studied these data sets in great detail in order to gain an understanding of how the distance between an individual and a casino impacts their likelihood to gamble, the number of trips they will take to the casino, and the amount that they will spend during each of those trips. We can then analyze gaming spending as a percentage of income, thus accounting for differences in disposable income in the expected gaming revenue generated from different zip codes.

The result of our detailed analysis of casino customer data is a generalized relationship between distance and gaming revenue, broken down into three relationships: distance vs. participation, distance vs. trips, and distance vs. revenue per trip. Our proprietary gravity model utilizes all three of these relationships to forecast gaming revenue for any given casino at the zip code level, with the level of gaming spending calculated as a percentage of income. In addition, by working at the zip code level we can consider demographic factors that may affect gaming revenue projections. Our gravity model uses drive times between a casino site and population centers, in this case zip code tabulation areas, from the five selected sites within the City of Chicago to approximately one hour away.

## The Huff model

The process described above is the methodology used to estimate the gaming spending at the zip code level, based in part on the distance between that zip code and a single regional casino. The Chicago metropolitan area gaming market has multiple casinos competing for customers. In order to split up contested zip codes between competitive casinos, we utilize a variation of the Huff model.

The Huff model is a probability model, which generates a probability matrix of all gaming market zip codes and casinos. The Huff model calculates the probability that customers in any given zip code will choose to patronize a certain casino, with the probabilities for any given zip code adding up to one. The calculation of these probabilities considers the distance away from each casino in the market, as well as the relative casino quality, programmed into the Huff model as an "attractiveness" value. Attractiveness is a single value which encompasses a casino's size, amenities, marketing efforts, and the other local attractions that may draw individuals under the assumption that some of those people may choose to gamble despite gaming not being the original intention of their visit.

The Huff model therefore splits every gaming market zip code into percentages for each casino. The farther away the casino from a zip code, the smaller the percentage will become until it becomes zero, indicating that the casino will not be competing for the casino patrons of that zip code due to a great distance disadvantage relative to the other casinos in the gaming market. Regional gaming is largely determined by proximity, while casinos can increase their revenue by improving the attractiveness of their assets the reality is that gaming is a commodity (a slot machine is still a slot machine no matter where it is located), and the core gaming customer will typically patronize the closest casino option. We have taken that into account when setting up the Huff model parameters.

The gravity model is our method for determining the gaming revenue originating from a zip code, and the Huff model is our method of splitting up that gaming revenue among competitive casinos. When combined, the two methods allow us to most accurately model revenue generation within regional gaming markets.

## **Section 1, Financial feasibility by site**

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### **Sites analyzed**

The five sites selected for the study by the City of Chicago are as follows:

1. Harborside Illinois Port Authority Golf Course (111<sup>th</sup> St. and Bishop Ford Freeway)
2. Former Michael Reese Hospital (31<sup>st</sup> St. and Cottage Grove Ave.)
3. Pershing Road and State St. (former Robert Taylor Homes)
4. Roosevelt Rd. and Kostner Ave.
5. Former U.S. Steel Plant (80<sup>th</sup> St. and Lake Shore Dr.)

In addition to our modeling methodologies described above, we also leveraged our extensive gaming and hospitality datasets, market knowledge, and in-person site visits in order to project total AGR per casino, as well as revenue projections for non-gaming elements. These results then flowed through an income statement driven in part by the unique elements of the Chicago license (e.g. an additional privilege tax equal to 1/3 of AGR), which then resulted in an EBITDA (profit) estimate for each site. While most of the sites show a very modest amount of profit, the return on investment for all sites is subpar at best, or even negative.

**Figure 8: City of Chicago casino sites**

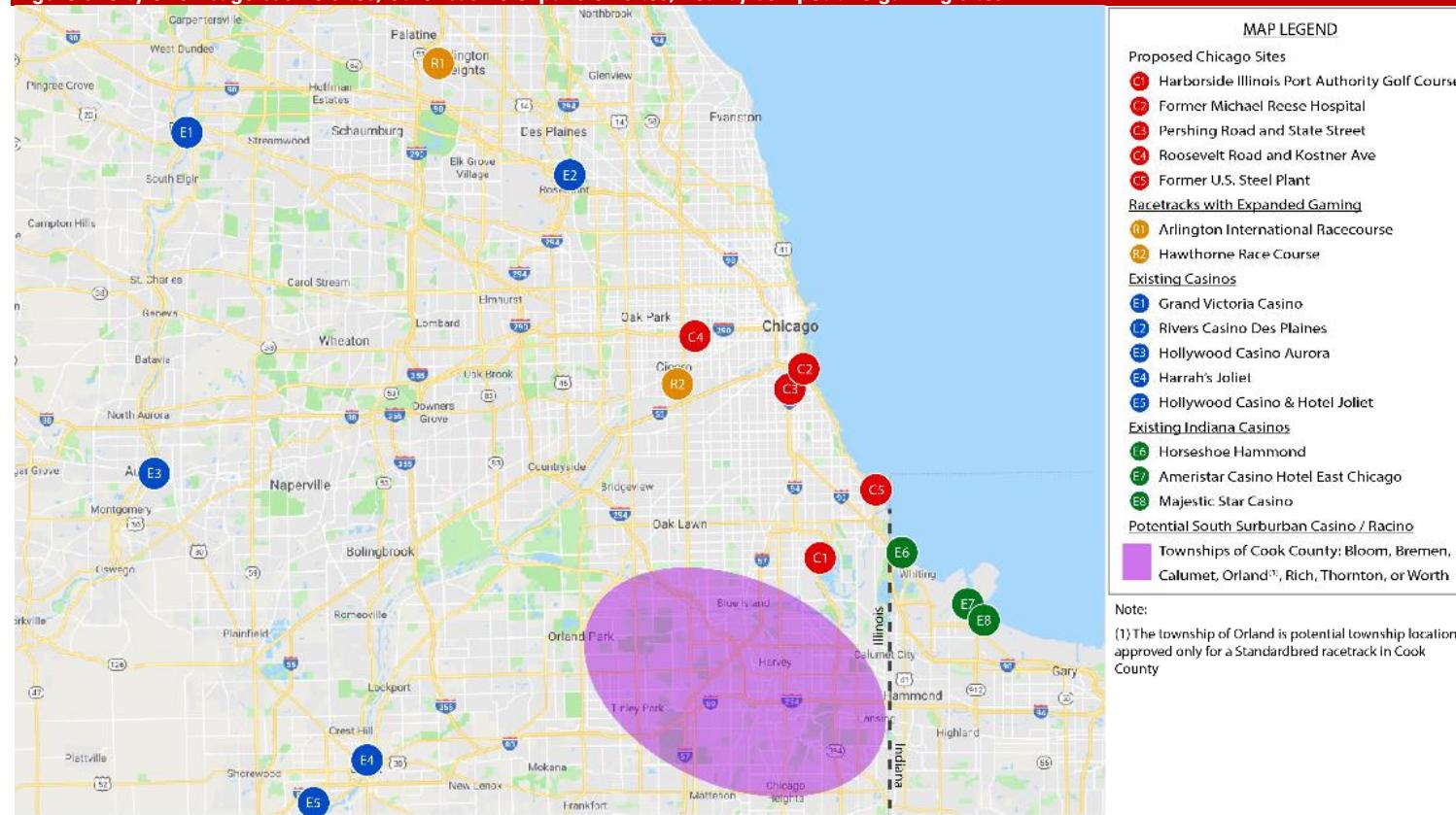


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*Source: Union Gaming Analytics*

There are five sites analyzed herein, which are depicted on the following map. This map also includes existing, expanding, and anticipated competitive casinos, including those authorized by Public Act 101-31. The analyses of the five sites culminate with an AGR forecast for each based on each achieving optimal steady-state operations.

**Figure 9: City of Chicago casino sites, other casino expansion sites, nearby competitive gaming sites**



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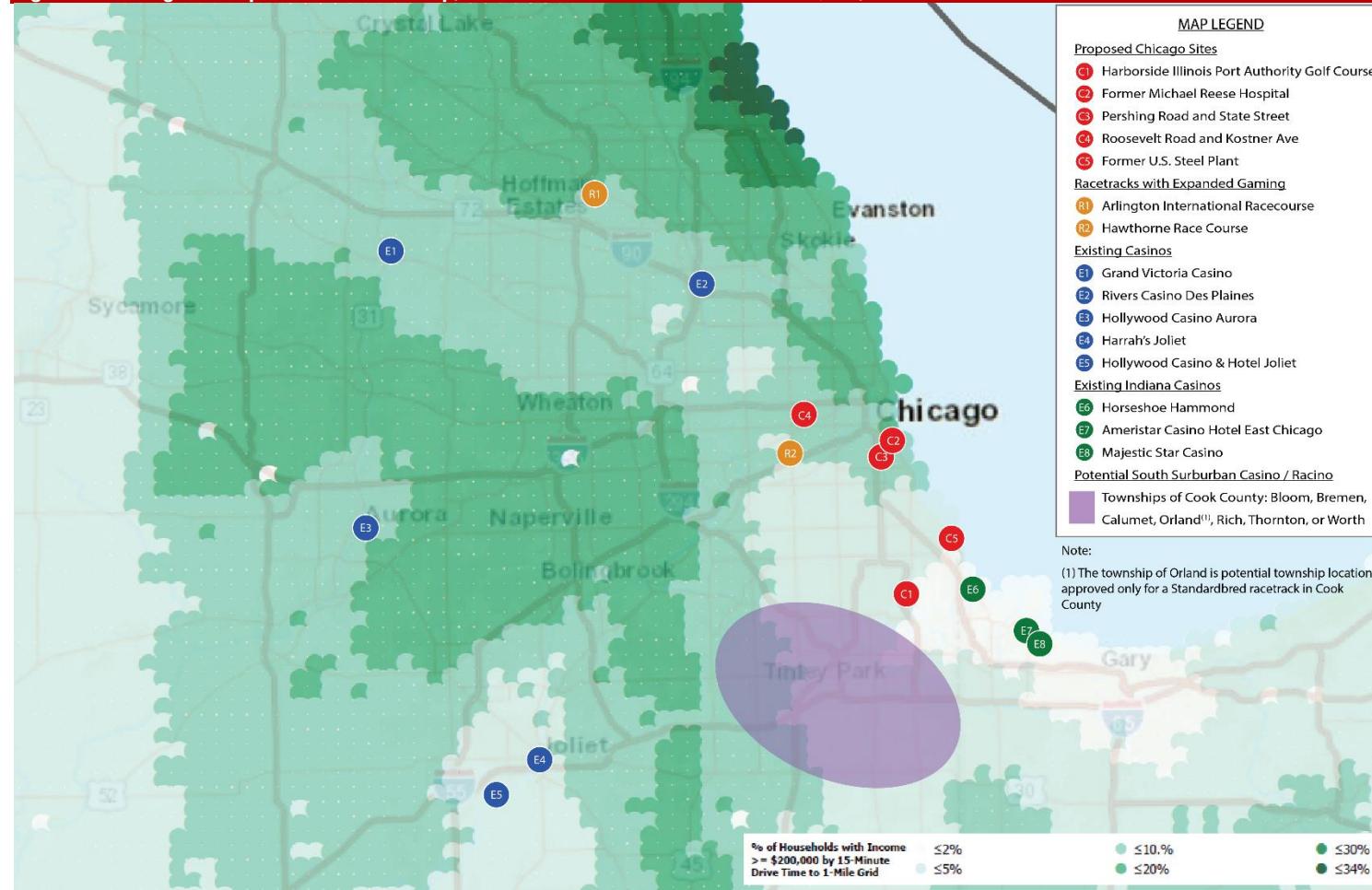
*Source: Union Gaming Analytics, Google Maps*

## Heat maps

### Wealth

The following map denotes the percentage of households with income in excess of \$200,000. Wealthier areas tend to be found to the north, west and southwest suburbs.

Figure 10: Chicago metropolitan area heat map, households with income in excess of \$200,000

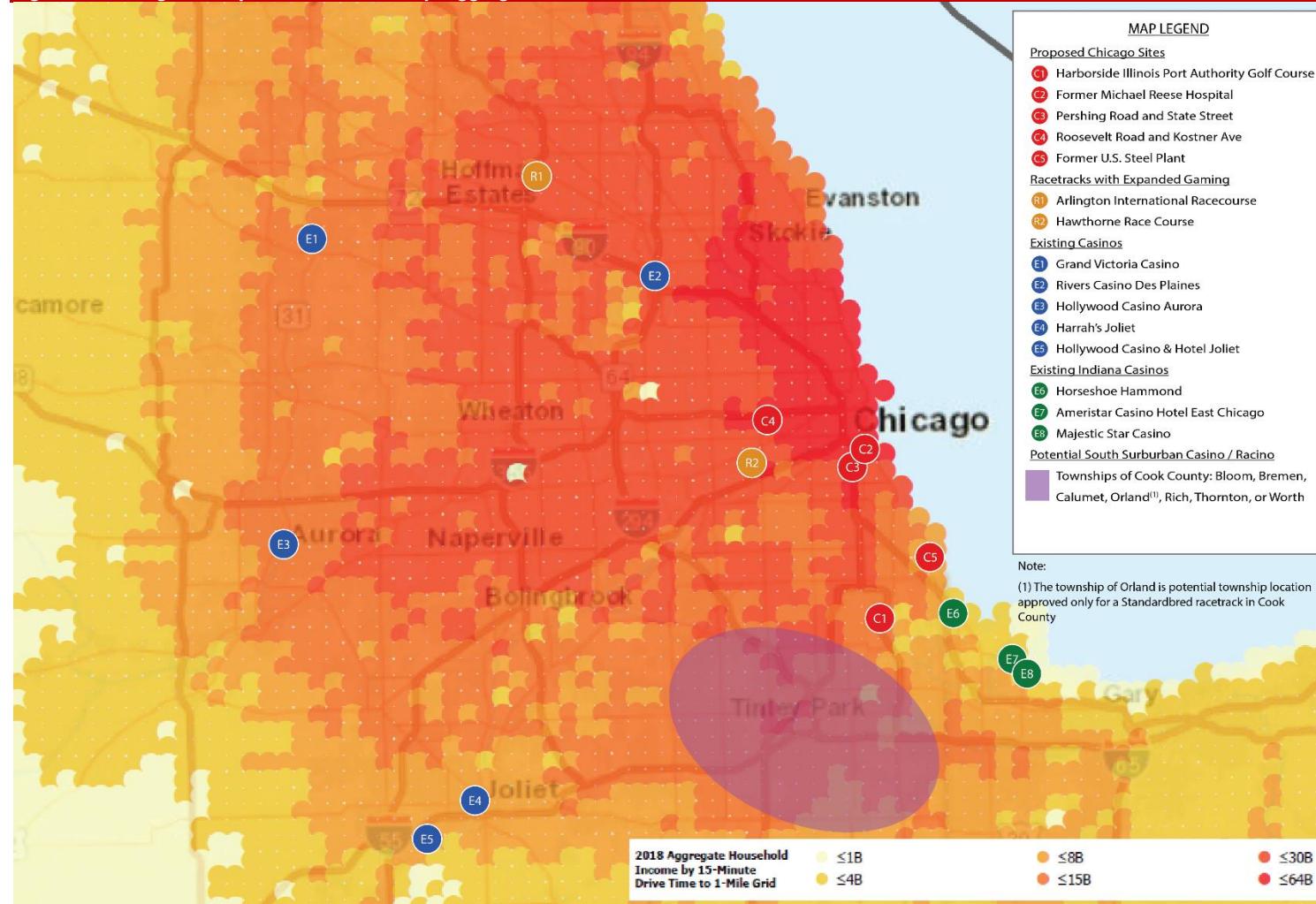


Source: Union Gaming Analytics, ArcGIS

## Total income

The following map denotes aggregate household income (effectively average household income multiplied by the number of households). This data shows higher concentrations of total household income in close proximity to downtown Chicago and areas to the north of downtown.

**Figure 11: Chicago metropolitan area heat map, aggregate household income**



Source: Union Gaming Analytics, ArcGIS

## **Harborside Illinois Port Authority Golf Course (111<sup>th</sup> St. and Bishop Ford Freeway)**

## Population and income

Detailed in the table below are population and income statistics for the 15, 30, and 60-minute drive times extending from the Harborside site. We expect the majority of customers to live within a 30-minute drive of the casino.

**Figure 12: Harborside demographics for 15, 30, and 60-minute drive times**

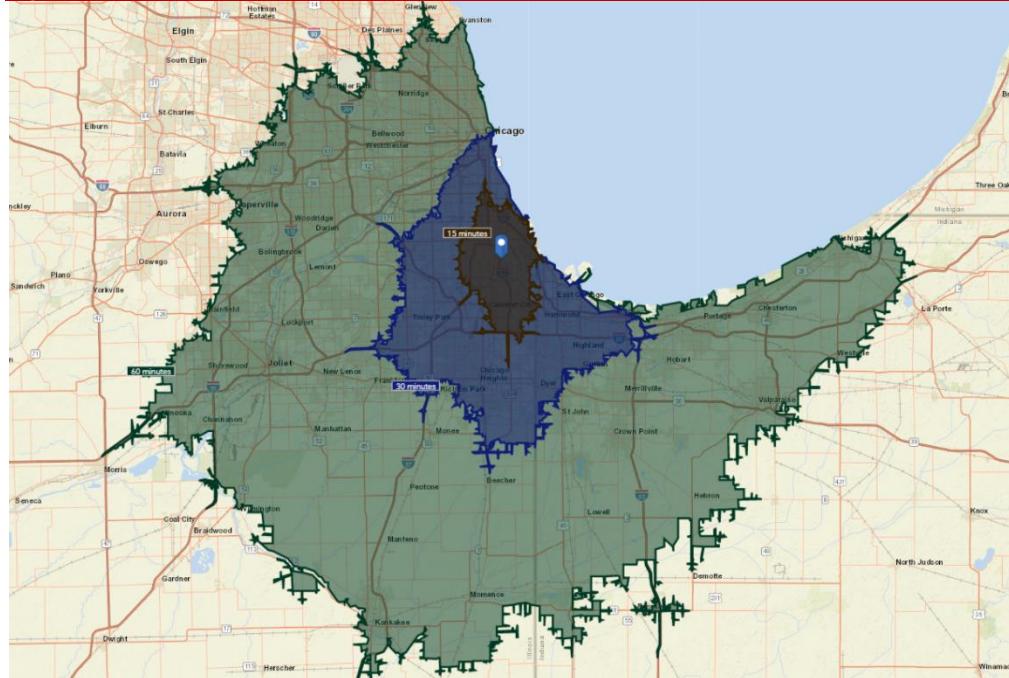
<u>0 to 15 minutes</u>	
Population	494,465
Per Capita Income	21,260
Total Income	10,512,325,900
<u>0 to 30 minutes</u>	
Population	1,955,781
Per Capita Income	25,480
Total Income	49,833,299,880
<u>0 to 60 minutes</u>	
Population	6,220,617
Per Capita Income	33,512
Total Income	208,465,316,904

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*Source: Union Gaming Analytics, ESRI*

The figure below depicts the same 15, 30, and 60-minute drive-times within a map of the Chicago metropolitan area.

**Figure 13: Harborside 15, 30, and 60-minute drive times**



Source: Union Gaming Analytics, ESRI

## AGR projections

We estimate total AGR at the Harborside site of approximately \$690 million as of 2024, inclusive of slot machines at the two airports. The year 2024 represents the first full year of stabilized operations after a one-year ramping period. The estimate includes approximately \$484 million in slot AGR, \$186 million in table games AGR and \$20 million in sports wagering AGR.

**Figure 14: AGR projections for stabilized year (2024)**

<i>(in \$mm)</i>	<b>Slots</b>	<b>Tables</b>	<b>Sports Betting</b>	<b>Total</b>
Local	343.3	119.7	19.4	482.4
Regional	37.1	12.9	0.6	50.6
Hotel	63.9	52.3	0.2	116.4
Tourism / Walk-in	2.9	1.0	0.2	4.0
Airport Slots	36.5			36.5
<b>Total</b>	<b>483.7</b>	<b>185.8</b>	<b>20.4</b>	<b>689.9</b>

*Source: Union Gaming Analytics*

## Revenue and EBITDA projections

Total property revenues, inclusive of non-gaming amenities, and EBITDA projections are presented in the below figure in a five-year format that includes the expectations for a one-year ramping period. Ultimately, the Harborside site generates steady-state EBITDA of approximately \$2 to \$3 million. The run-rate return on investment is effectively zero.

**Figure 15: Five-year revenue and EBITDA forecast**

(\$mm, otherwise noted)	Year 1	Year 2	Year 3	Year 4	Year 5
	2023	2024	2025	2026	2027
<b>Gaming Revenues</b>					
Table Games	\$167.2	\$185.8	\$191.4	\$197.1	\$203.0
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Slot Machines @ Casino	\$402.5	\$447.2	\$460.6	\$474.4	\$488.7
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Slot Machines @ Airport	\$32.9	\$36.5	\$37.6	\$38.7	\$39.9
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Sports	\$18.4	\$20.4	\$21.0	\$21.6	\$22.3
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Adjusted Gross Receipts	\$620.9	\$689.9	\$710.6	\$731.9	\$753.9
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Gaming Promotional Expense	(\$36.7)	(\$40.8)	(\$42.0)	(\$43.2)	(\$44.5)
As a % of AGR (%)	5.9%	5.9%	5.9%	5.9%	5.9%
Net Gaming Revenue	\$584.2	\$649.1	\$668.6	\$688.7	\$709.3
<b>Other Revenues</b>					
Hotel	\$32.3	\$35.8	\$36.9	\$38.0	\$39.2
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
F&B	\$40.3	\$44.8	\$46.1	\$47.5	\$48.9
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Entertainment/Other	\$31.0	\$34.5	\$35.5	\$36.6	\$37.7
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Total Other Revenue	\$103.6	\$115.1	\$118.6	\$122.1	\$125.8
Total Net Revenues	\$687.8	\$764.3	\$787.2	\$810.8	\$835.1
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
<b>Expenses</b>					
Casino	\$160.4	\$149.8	\$154.0	\$158.3	\$162.8
Hotel	\$16.1	\$17.9	\$18.5	\$19.0	\$19.6
F&B	\$32.3	\$35.8	\$36.9	\$38.0	\$39.2
Entertainment/Other	\$12.4	\$13.8	\$14.2	\$14.6	\$15.1
Total Operating Expenses	\$221.2	\$217.4	\$223.6	\$230.0	\$236.6
Gaming Tax: Slot @ Casino	\$166.9	\$189.2	\$195.9	\$202.8	\$210.0
Gaming Tax: Slot @ Airport	\$16.4	\$18.3	\$18.8	\$19.4	\$19.9
Gaming Tax: Table	\$32.2	\$35.9	\$37.0	\$38.2	\$39.4
Gaming Tax: Sports	\$2.8	\$3.1	\$3.2	\$3.2	\$3.3
City of Chicago AGR Privilege Tax	\$207.0	\$230.0	\$236.9	\$244.0	\$251.3
Casino Admissions Tax	\$13.9	\$15.0	\$15.0	\$15.0	\$15.0
Cook County Slot Machine Tax	\$4.0	\$4.0	\$4.0	\$4.0	\$4.0
Total Gaming-related Taxes	\$443.1	\$495.4	\$510.8	\$526.6	\$542.9
Management Level Expense (G&A)	\$50.6	\$49.0	\$50.1	\$51.1	\$52.2
Total Expenses	\$714.8	\$761.8	\$784.4	\$807.7	\$831.7
EBITDA	(\$27.0)	\$2.4	\$2.7	\$3.1	\$3.5
Margin (%)	-3.9%	0.3%	0.3%	0.4%	0.4%

Source: Union Gaming Analytics

## **Site notes**

### Positive

- Harborside has the best freeway access relative to the other sites
- Modest amount of retail directly across from the site is a positive for driving foot traffic
- Plenty of land for development if part of the golf course is used; alternatively, development without using golf course land would preserve the course as a resort amenity

### Negative

- Most distant site for most city residents
- Many city residents might find it easier to take the Skyway and visit the Horseshoe in Indiana

## Former Michael Reese Hospital (31<sup>st</sup> St. and Cottage Grove Ave.)

### Population and income

Detailed in the table below are population and income statistics for the 15, 30, and 60-minute drive times extending from the Former Michael Reese Hospital site. We expect the majority of customers to live within a 30-minute drive of the casino.

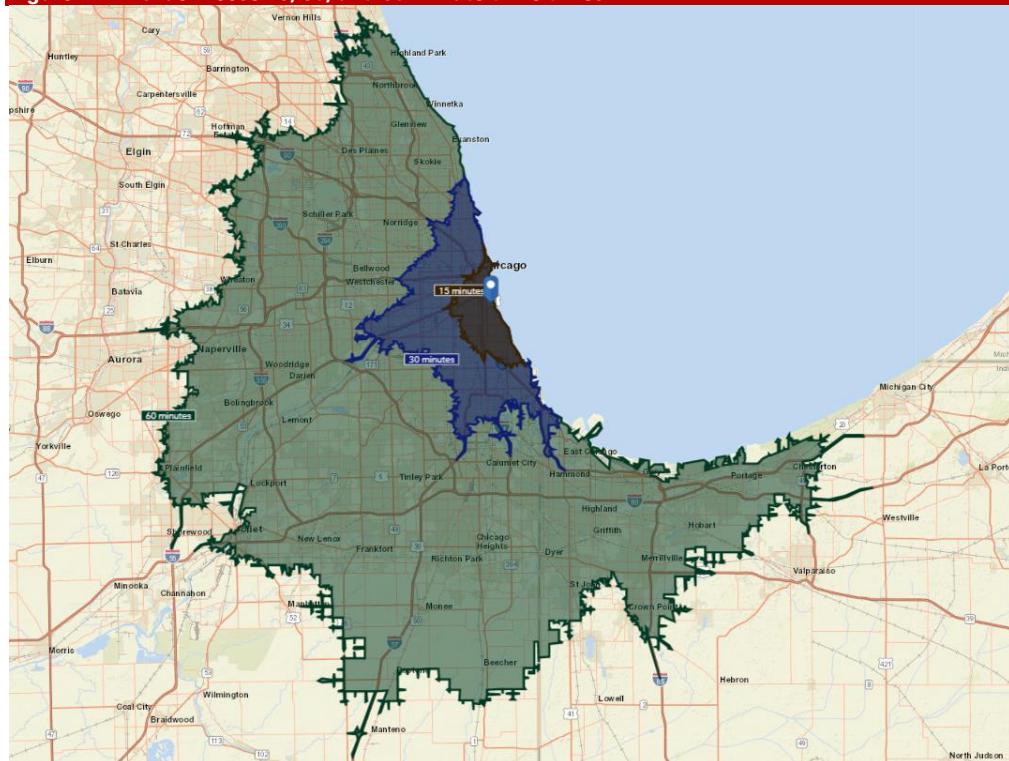
**Figure 16: Michael Reese demographics for 15, 30, and 60-minute drive times**

<u>0 to 15 minutes</u>	
Population	424,960
Per Capita Income	39,118
Total Income	16,623,585,280
<u>0 to 30 minutes</u>	
Population	2,091,209
Per Capita Income	34,789
Total Income	72,751,069,901
<u>0 to 60 minutes</u>	
Population	6,341,371
Per Capita Income	35,438
Total Income	224,725,505,498

Source: Union Gaming Analytics, ESRI

The figure below depicts the same 15, 30, and 60-minute drive-times within a map of the Chicago metropolitan area.

**Figure 17: Michael Reese 15, 30, and 60-minute drive times**



Source: Union Gaming Analytics, ESRI

### AGR projections

We estimate total AGR at the Former Michael Reese Hospital site of approximately \$806 million as of 2024, inclusive of slot machines at the two airports. The year 2024 represents the first full year of stabilized operations after a one-year ramping period. The estimate includes approximately \$562 million in slot AGR, \$223 million in table games AGR and \$20 million in sports wagering AGR.

**Figure 18: AGR projections for stabilized year (2024)**

<i>(in \$mm)</i>	<b>Slots</b>	<b>Tables</b>	<b>Sports Betting</b>	<b>Total</b>
Local	390.1	136.0	19.4	545.5
Regional	39.0	13.6	0.6	53.2
Hotel	85.2	69.7	0.2	155.1
Tourism / Walk-in	11.5	3.8	0.2	15.5
Airport Slots	36.5			36.5
<b>Total</b>	<b>562.4</b>	<b>223.1</b>	<b>20.4</b>	<b>805.9</b>

*Source: Union Gaming Analytics*

## Revenue and EBITDA projections

Total property revenues, inclusive of non-gaming amenities, and EBITDA projections are presented in the below figure in a five-year format that includes the expectations for a one-year ramping period. Ultimately, the Former Michael Reese Hospital site generates steady-state EBITDA of approximately \$27 to \$31 million. The run-rate return on investment is less than 2%.

**Figure 19: Five-year revenue and EBITDA forecast**

(\$mm, otherwise noted)	Year 1	Year 2	Year 3	Year 4	Year 5
	2023	2024	2025	2026	2027
<b>Gaming Revenues</b>					
Table Games	\$200.8	\$223.1	\$229.8	\$236.7	\$243.8
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Slot Machines @ Casino	\$473.3	\$525.9	\$541.7	\$557.9	\$574.7
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Slot Machines @ Airport	\$32.9	\$36.5	\$37.6	\$38.7	\$39.9
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Sports	\$18.4	\$20.4	\$21.0	\$21.6	\$22.3
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Adjusted Gross Receipts	\$725.3	\$805.9	\$830.1	\$855.0	\$880.6
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Gaming Promotional Expense	(\$38.4)	(\$42.7)	(\$44.0)	(\$45.3)	(\$46.7)
As a % of AGR (%)	5.3%	5.3%	5.3%	5.3%	5.3%
Net Gaming Revenue	\$686.9	\$763.2	\$786.1	\$809.7	\$834.0
<b>Other Revenues</b>					
Hotel	\$32.3	\$35.8	\$36.9	\$38.0	\$39.2
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
F&B	\$40.3	\$44.8	\$46.1	\$47.5	\$48.9
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Entertainment/Other	\$36.3	\$40.3	\$41.5	\$42.7	\$44.0
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Total Other Revenue	\$108.8	\$120.9	\$124.5	\$128.3	\$132.1
Total Net Revenues	\$795.7	\$884.1	\$910.7	\$938.0	\$966.1
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
<b>Expenses</b>					
Casino	\$167.3	\$154.0	\$158.4	\$162.8	\$167.4
Hotel	\$16.1	\$17.9	\$18.5	\$19.0	\$19.6
F&B	\$32.3	\$35.8	\$36.9	\$38.0	\$39.2
Entertainment/Other	\$14.5	\$16.1	\$16.6	\$17.1	\$17.6
Total Operating Expenses	\$230.2	\$223.9	\$230.3	\$237.0	\$243.8
Gaming Tax: Slot @ Casino	\$202.3	\$228.6	\$236.5	\$244.6	\$253.0
Gaming Tax: Slot @ Airport	\$16.4	\$18.3	\$18.8	\$19.4	\$19.9
Gaming Tax: Table	\$38.9	\$43.4	\$44.7	\$46.1	\$47.5
Gaming Tax: Sports	\$2.8	\$3.1	\$3.2	\$3.2	\$3.3
City of Chicago AGR Privilege Tax	\$241.8	\$268.6	\$276.7	\$285.0	\$293.5
Casino Admissions Tax	\$16.3	\$17.6	\$17.6	\$17.6	\$17.6
Cook County Slot Machine Tax	\$4.0	\$4.0	\$4.0	\$4.0	\$4.0
Total Gaming-related Taxes	\$522.5	\$583.5	\$601.4	\$619.9	\$638.9
Management Level Expense (G&A)	\$51.6	\$49.6	\$50.7	\$51.7	\$52.8
Total Expenses	\$804.2	\$857.0	\$882.4	\$908.6	\$935.4
EBITDA	(\$8.5)	\$27.1	\$28.2	\$29.4	\$30.7
Margin (%)	-1.1%	3.1%	3.1%	3.1%	3.2%

Source: Union Gaming Analytics

## **Site notes**

### Positive

- Close to McCormick Place and therefore many MICE attendees
- Short drive from most downtown (Loop) locations
- Appealing near-water location

### Negative

- Not easily walkable from McCormick Place / on the opposite side of the thoroughfare
- Nearby apartment towers could block view of the casino and lead to access issues between pedestrians and drivers
- Traffic complications could arise given multiple highways / major roads that exit onto a small feeder road (will need notable road infrastructure improvements)

## Pershing Road and State St. (former Robert Taylor Homes)

### Population and income

Detailed in the table below are population and income statistics for the 15, 30, and 60-minute drive times extending from the Pershing Road site. We expect the majority of customers to live within a 30-minute drive of the casino.

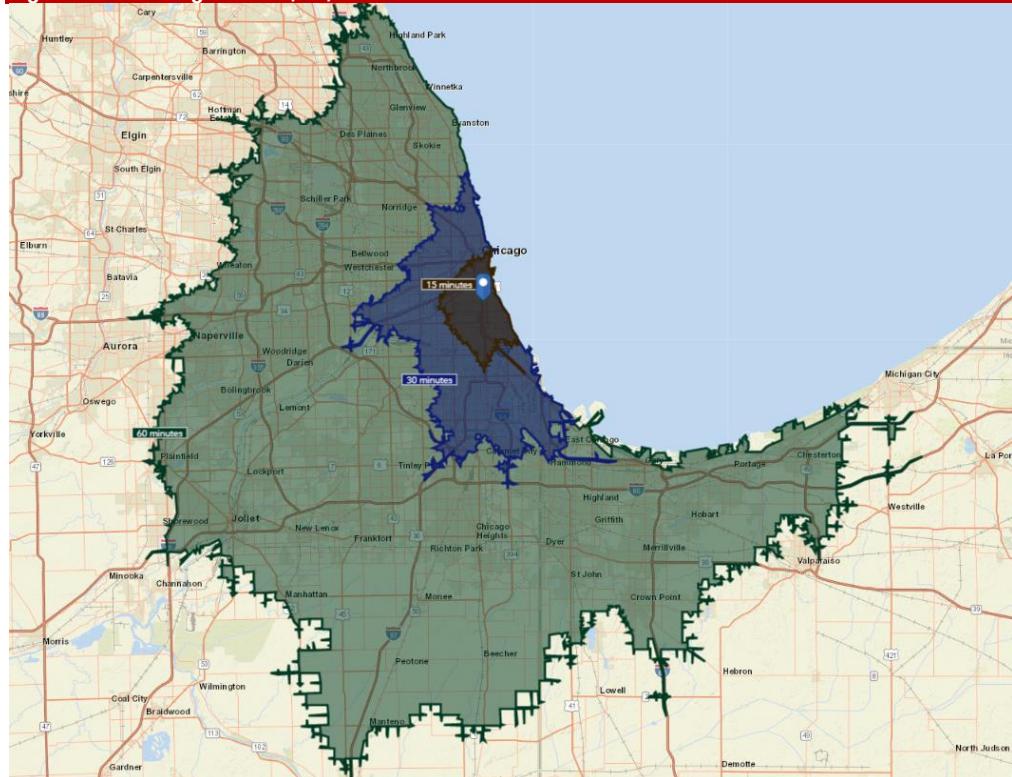
**Figure 20: Pershing Road demographics for 15, 30, and 60-minute drive times**

<u>0 to 15 minutes</u>	
Population	493,530
Per Capita Income	28,236
Total Income	13,935,313,080
<u>0 to 30 minutes</u>	
Population	2,218,361
Per Capita Income	33,299
Total Income	73,869,202,939
<u>0 to 60 minutes</u>	
Population	6,510,027
Per Capita Income	35,336
Total Income	230,038,314,072

Source: Union Gaming Analytics, ESRI

The figure below depicts the same 15, 30, and 60-minute drive-times within a map of the Chicago metropolitan area.

**Figure 21: Pershing Road 15, 30, and 60-minute drive times**



Source: Union Gaming Analytics, ESRI

## AGR projections

We estimate total AGR at the Pershing Road site of approximately \$782 million as of 2024, inclusive of slot machines at the two airports. The year 2024 represents the first full year of stabilized operations after a one-year ramping period. The estimate includes approximately \$547 million in slot AGR, \$214 million in table games AGR and \$20 million in sports wagering AGR.

**Figure 22: AGR projections for stabilized year (2024)**

<i>(in \$mm)</i>	<b>Slots</b>	<b>Tables</b>	<b>Sports Betting</b>	<b>Total</b>
Local	386.2	134.6	19.4	540.2
Regional	39.8	13.9	0.6	54.3
Hotel	76.7	62.8	0.2	139.7
Tourism / Walk-in	8.0	2.7	0.2	10.9
Airport Slots	36.5			36.5
<b>Total</b>	<b>547.3</b>	<b>213.9</b>	<b>20.4</b>	<b>781.6</b>

*Source: Union Gaming Analytics*

## Revenue and EBITDA projections

Total property revenues, inclusive of non-gaming amenities, and EBITDA projections are presented in the below figure in a five-year format that includes the expectations for a one-year ramping period. Ultimately, the Pershing Road site generates steady-state EBITDA of approximately \$22 to \$25 million. The run-rate return on investment is less than 2%.

**Figure 23: Five-year revenue and EBITDA forecast**

(\$mm, otherwise noted)	Year 1	Year 2	Year 3	Year 4	Year 5
	2023	2024	2025	2026	2027
<b>Gaming Revenues</b>					
Table Games	\$192.5	\$213.9	\$220.3	\$226.9	\$233.7
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Slot Machines @ Casino	\$459.7	\$510.8	\$526.1	\$541.9	\$558.2
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Slot Machines @ Airport	\$32.9	\$36.5	\$37.6	\$38.7	\$39.9
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Sports	\$18.4	\$20.4	\$21.0	\$21.6	\$22.3
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Adjusted Gross Receipts	\$703.4	\$781.6	\$805.1	\$829.2	\$854.1
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Gaming Promotional Expense	(\$38.1)	(\$42.3)	(\$43.6)	(\$44.9)	(\$46.2)
As a % of AGR (%)	5.4%	5.4%	5.4%	5.4%	5.4%
Net Gaming Revenue	\$665.4	\$739.3	\$761.5	\$784.3	\$807.9
<b>Other Revenues</b>					
Hotel	\$32.3	\$35.8	\$36.9	\$38.0	\$39.2
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
F&B	\$40.3	\$44.8	\$46.1	\$47.5	\$48.9
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Entertainment/Other	\$35.2	\$39.1	\$40.3	\$41.5	\$42.7
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Total Other Revenue	\$107.7	\$119.7	\$123.3	\$127.0	\$130.8
Total Net Revenues	\$773.1	\$859.0	\$884.8	\$911.3	\$938.7
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
<b>Expenses</b>					
Casino	\$165.8	\$153.1	\$157.4	\$161.9	\$166.4
Hotel	\$16.1	\$17.9	\$18.5	\$19.0	\$19.6
F&B	\$32.3	\$35.8	\$36.9	\$38.0	\$39.2
Entertainment/Other	\$14.1	\$15.6	\$16.1	\$16.6	\$17.1
Total Operating Expenses	\$228.3	\$222.5	\$228.9	\$235.5	\$242.2
Gaming Tax: Slot @ Casino	\$195.5	\$221.0	\$228.7	\$236.6	\$244.7
Gaming Tax: Slot @ Airport	\$16.4	\$18.3	\$18.8	\$19.4	\$19.9
Gaming Tax: Table	\$37.3	\$41.5	\$42.8	\$44.1	\$45.5
Gaming Tax: Sports	\$2.8	\$3.1	\$3.2	\$3.2	\$3.3
City of Chicago AGR Privilege Tax	\$234.5	\$260.5	\$268.4	\$276.4	\$284.7
Casino Admissions Tax	\$15.8	\$17.1	\$17.1	\$17.1	\$17.1
Cook County Slot Machine Tax	\$4.0	\$4.0	\$4.0	\$4.0	\$4.0
Total Gaming-related Taxes	\$506.2	\$565.5	\$582.9	\$600.8	\$619.2
Management Level Expense (G&A)	\$51.4	\$49.5	\$50.5	\$51.6	\$52.7
Total Expenses	\$785.9	\$837.5	\$862.3	\$887.8	\$914.1
EBITDA	(\$12.7)	\$21.5	\$22.5	\$23.5	\$24.5
Margin (%)	-1.6%	2.5%	2.5%	2.6%	2.6%

Source: Union Gaming Analytics

## **Site notes**

### Positive

- Multiple lots on which to develop
- Easy access from most directions, although likely frequent heavy traffic
- Could potentially form an entertainment zone given proximity to Guaranteed Rate Field

### Negative

- Lot sizes are relatively small and might require piecemeal development (casino on one lot, hotel on another, etc.); otherwise would require streets to be removed
- Other than the White Sox there is little in terms of complementary businesses in the area

## Roosevelt Rd. and Kostner Ave.

### Population and income

Detailed in the table below are population and income statistics for the 15, 30, and 60-minute drive times extending from the Roosevelt Road site. We expect the majority of customers to live within a 30-minute drive of the casino.

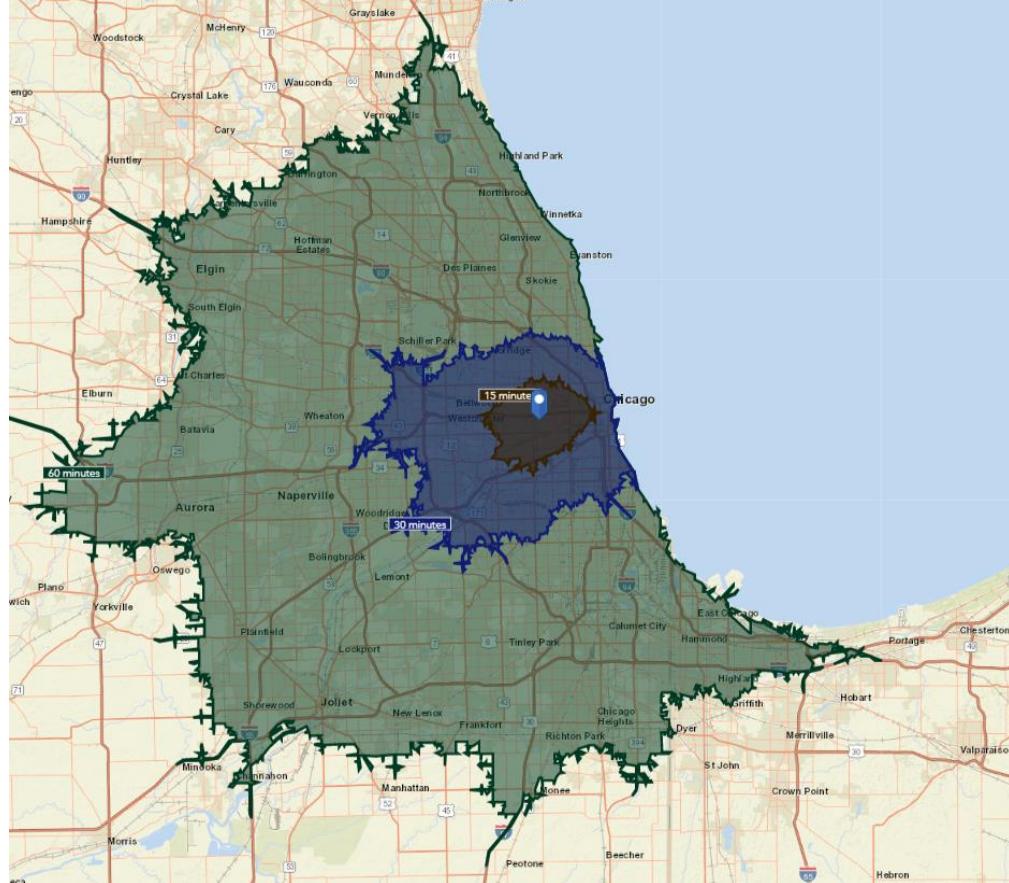
**Figure 24: Roosevelt Road demographics for 15, 30, and 60-minute drive times**

<u>0 to 15 minutes</u>	
Population	553,301
Per Capita Income	21,691
Total Income	12,001,651,991
<u>0 to 30 minutes</u>	
Population	2,384,519
Per Capita Income	34,747
Total Income	82,854,881,693
<u>0 to 60 minutes</u>	
Population	7,470,897
Per Capita Income	36,478
Total Income	272,523,380,766

Source: Union Gaming Analytics, ESRI

The figure below depicts the same 15, 30, and 60-minute drive-times within a map of the Chicago metropolitan area.

**Figure 25: Roosevelt Road 15, 30, and 60-minute drive times**



Source: Union Gaming Analytics, ESRI

### AGR projections

We estimate total AGR at the Roosevelt Road site of approximately \$698 million as of 2024, inclusive of slot machines at the two airports. The year 2024 represents the first full year of stabilized operations after a one-year ramping period. The estimate includes approximately \$494 million in slot AGR, \$183 million in table games AGR and \$20 million in sports wagering AGR.

**Figure 26: AGR projections for stabilized year (2024)**

<i>(in \$mm)</i>	<b>Slots</b>	<b>Tables</b>	<b>Sports Betting</b>	<b>Total</b>
Local	366.7	127.8	19.4	513.9
Regional	35.1	12.2	0.6	47.9
Hotel	51.1	41.8	0.2	93.2
Tourism / Walk-in	4.6	1.5	0.2	6.3
Airport Slots	36.5			36.5
<b>Total</b>	<b>494.1</b>	<b>183.4</b>	<b>20.4</b>	<b>697.9</b>

*Source: Union Gaming Analytics*

## Revenue and EBITDA projections

Total property revenues, inclusive of non-gaming amenities, and EBITDA projections are presented in the below figure in a five-year format that includes the expectations for a one-year ramping period. Ultimately, the Roosevelt Road site generates steady-state EBITDA of approximately \$3 to \$4 million. The run-rate return on investment is effectively zero.

**Figure 27: Five-year revenue and EBITDA forecast**

(\$mm, otherwise noted)	Year 1	Year 2	Year 3	Year 4	Year 5
	2023	2024	2025	2026	2027
<b>Gaming Revenues</b>					
Table Games	\$165.1	\$183.4	\$188.9	\$194.6	\$200.4
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Slot Machines @ Casino	\$411.8	\$457.6	\$471.3	\$485.5	\$500.0
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Slot Machines @ Airport	\$32.9	\$36.5	\$37.6	\$38.7	\$39.9
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Sports	\$18.4	\$20.4	\$21.0	\$21.6	\$22.3
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Adjusted Gross Receipts	\$628.1	\$697.9	\$718.8	\$740.4	\$762.6
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Gaming Promotional Expense	(\$36.8)	(\$40.9)	(\$42.1)	(\$43.4)	(\$44.7)
As a % of AGR (%)	5.9%	5.9%	5.9%	5.9%	5.9%
Net Gaming Revenue	\$591.3	\$657.0	\$676.7	\$697.0	\$717.9
<b>Other Revenues</b>					
Hotel	\$32.3	\$35.8	\$36.9	\$38.0	\$39.2
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
F&B	\$40.3	\$44.8	\$46.1	\$47.5	\$48.9
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Entertainment/Other	\$31.4	\$34.9	\$35.9	\$37.0	\$38.1
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Total Other Revenue	\$104.0	\$115.5	\$119.0	\$122.6	\$126.2
Total Net Revenues	\$695.3	\$772.5	\$795.7	\$819.6	\$844.2
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
<b>Expenses</b>					
Casino	\$160.8	\$150.0	\$154.2	\$158.6	\$163.0
Hotel	\$16.1	\$17.9	\$18.5	\$19.0	\$19.6
F&B	\$32.3	\$35.8	\$36.9	\$38.0	\$39.2
Entertainment/Other	\$12.6	\$14.0	\$14.4	\$14.8	\$15.3
Total Operating Expenses	\$221.7	\$217.7	\$224.0	\$230.4	\$237.0
Gaming Tax: Slot @ Casino	\$171.5	\$194.4	\$201.3	\$208.4	\$215.6
Gaming Tax: Slot @ Airport	\$16.4	\$18.3	\$18.8	\$19.4	\$19.9
Gaming Tax: Table	\$31.8	\$35.4	\$36.5	\$37.7	\$38.8
Gaming Tax: Sports	\$2.8	\$3.1	\$3.2	\$3.2	\$3.3
City of Chicago AGR Privilege Tax	\$209.4	\$232.6	\$239.6	\$246.8	\$254.2
Casino Admissions Tax	\$14.1	\$15.2	\$15.2	\$15.2	\$15.2
Cook County Slot Machine Tax	\$4.0	\$4.0	\$4.0	\$4.0	\$4.0
Total Gaming-related Taxes	\$449.9	\$503.0	\$518.6	\$534.6	\$551.1
Management Level Expense (G&A)	\$50.6	\$49.1	\$50.1	\$51.1	\$52.2
Total Expenses	\$722.3	\$769.8	\$792.6	\$816.1	\$840.3
EBITDA	(\$27.0)	\$2.7	\$3.1	\$3.4	\$3.8
Margin (%)	-3.9%	0.4%	0.4%	0.4%	0.5%

Source: Union Gaming Analytics

## **Site notes**

### Positive

- Central location with relatively easy access for residents living in most directions
- Could potentially avoid fighting some traffic issues that might arise at other sites
- Large amount of land should be sufficient for development needs

### Negative

- Some visitors might be deterred given perceptions of surrounding neighborhood
- Many empty storefronts in immediate vicinity and no meaningful complementary businesses for a casino

## Former U.S. Steel Plant (80<sup>th</sup> St. and Lake Shore Dr.)

## Population and income

Detailed in the table below are population and income statistics for the 15, 30, and 60-minute drive times extending from the Former U.S. Steel Plant site. We expect the majority of customers to live within a 30-minute drive of the casino.

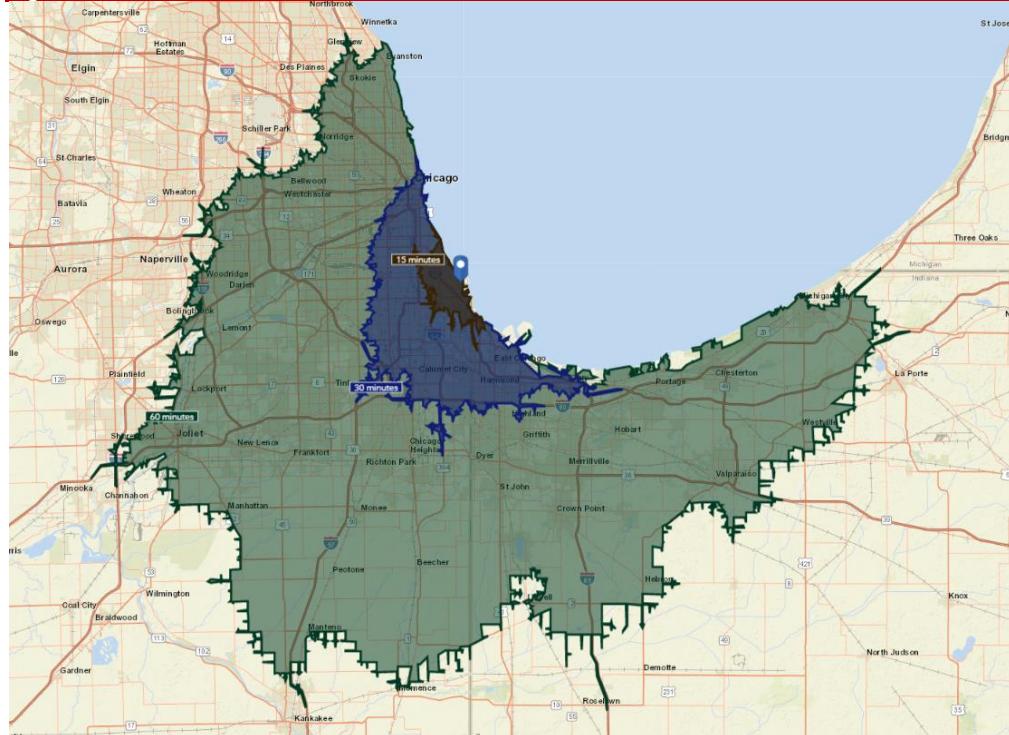
**Figure 28: U.S. Steel demographics for 15, 30, and 60-minute drive times**

<u>0 to 15 minutes</u>	
Population	212,242
Per Capita Income	22,653
Total Income	4,807,918,026
<u>0 to 30 minutes</u>	
Population	1,354,586
Per Capita Income	26,372
Total Income	35,723,141,992
<u>0 to 60 minutes</u>	
Population	5,407,678
Per Capita Income	33,263
Total Income	179,875,593,314

Source: Union Gaming Analytics, ESRI

The figure below depicts the same 15, 30, and 60-minute drive-times within a map of the Chicago metropolitan area.

**Figure 29: U.S. Steel 15, 30, and 60-minute drive times**



Source: Union Gaming Analytics, ESRI

### AGR projections

We estimate total AGR at the Former U.S. Steel Plant site of approximately \$653 million as of 2024, inclusive of slot machines at the two airports. The year 2024 represents the first full year of stabilized operations after a one-year ramping period. The estimate includes approximately \$461 million in slot AGR, \$172 million in table games AGR and \$20 million in sports wagering AGR.

**Figure 30: AGR projections for stabilized year (2024)**

<i>(in \$mm)</i>	<b>Slots</b>	<b>Tables</b>	<b>Sports Betting</b>	<b>Total</b>
Local	335.5	116.9	19.4	471.9
Regional	35.1	12.2	0.6	47.9
Hotel	51.1	41.8	0.2	93.2
Tourism / Walk-in	2.3	0.8	0.2	3.3
Airport Slots	36.5			36.5
<b>Total</b>	<b>460.6</b>	<b>171.8</b>	<b>20.4</b>	<b>652.7</b>

*Source: Union Gaming Analytics*

## Revenue and EBITDA projections

Total property revenues, inclusive of non-gaming amenities, and EBITDA projections are presented in the below figure in a five-year format that includes the expectations for a one-year ramping period. Ultimately, the Former U.S. Steel Plant site generates steady-state EBITDA of approximately -\$6 million. The run-rate return on investment is negative.

**Figure 31: Five-year revenue and EBITDA forecast**

(\$mm, otherwise noted)	Year 1	Year 2	Year 3	Year 4	Year 5
	2023	2024	2025	2026	2027
<b>Gaming Revenues</b>					
Table Games	\$154.6	\$171.8	\$176.9	\$182.2	\$187.7
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Slot Machines @ Casino	\$381.7	\$424.1	\$436.8	\$449.9	\$463.4
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Slot Machines @ Airport	\$32.9	\$36.5	\$37.6	\$38.7	\$39.9
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Sports	\$18.4	\$20.4	\$21.0	\$21.6	\$22.3
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Adjusted Gross Receipts	\$587.5	\$652.7	\$672.3	\$692.5	\$713.3
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Gaming Promotional Expense	(\$36.1)	(\$40.1)	(\$41.3)	(\$42.6)	(\$43.9)
As a % of AGR (%)	6.1%	6.1%	6.1%	6.1%	6.1%
Net Gaming Revenue	\$551.3	\$612.6	\$631.0	\$649.9	\$669.4
<b>Other Revenues</b>					
Hotel	\$32.3	\$35.8	\$36.9	\$38.0	\$39.2
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
F&B	\$40.3	\$44.8	\$46.1	\$47.5	\$48.9
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Entertainment/Other	\$29.4	\$32.6	\$33.6	\$34.6	\$35.7
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
Total Other Revenue	\$101.9	\$113.3	\$116.7	\$120.2	\$123.8
Total Net Revenues	\$653.3	\$725.9	\$747.6	\$770.1	\$793.2
Growth (%)	n/a	11.1%	3.0%	3.0%	3.0%
<b>Expenses</b>					
Casino	\$158.1	\$148.4	\$152.6	\$156.9	\$161.3
Hotel	\$16.1	\$17.9	\$18.5	\$19.0	\$19.6
F&B	\$32.3	\$35.8	\$36.9	\$38.0	\$39.2
Entertainment/Other	\$11.7	\$13.1	\$13.4	\$13.8	\$14.3
Total Operating Expenses	\$218.2	\$215.2	\$221.4	\$227.7	\$234.3
Gaming Tax: Slot @ IR	\$156.5	\$177.7	\$184.0	\$190.6	\$197.3
Gaming Tax: Slot @ Airport	\$16.4	\$18.3	\$18.8	\$19.4	\$19.9
Gaming Tax: Table	\$29.7	\$33.1	\$34.1	\$35.2	\$36.3
Gaming Tax: Sports	\$2.8	\$3.1	\$3.2	\$3.2	\$3.3
City of Chicago AGR Privilege Tax	\$195.8	\$217.6	\$224.1	\$230.8	\$237.8
Casino Admissions Tax	\$13.1	\$14.2	\$14.2	\$14.2	\$14.2
Cook County Slot Machine Tax	\$4.0	\$4.0	\$4.0	\$4.0	\$4.0
Total Gaming-related Taxes	\$418.3	\$467.8	\$482.4	\$497.4	\$512.8
Management Level Expense (G&A)	\$50.2	\$48.9	\$49.9	\$50.9	\$52.0
Total Expenses	\$686.7	\$731.9	\$753.7	\$776.0	\$799.0
EBITDA	(\$33.4)	(\$6.1)	(\$6.0)	(\$6.0)	(\$5.9)
Margin (%)	-5.1%	-0.8%	-0.8%	-0.8%	-0.7%

Source: Union Gaming Analytics

## **Site notes**

### Positive

- Large amount of land should be sufficient for development needs; could be part of multiple projects geared towards revitalizing the area
- Probably the best site for casino development from the perspective of land size and shape
- Lakefront access can be highlighted

### Negative

- No complementary businesses in the immediate area; other 3<sup>rd</sup> party dining and entertainment development would be a must for the area
- Would perform better with access roads to nearby highway (I90) in order to avoid drive through residential area

## Summary

Ultimately, and while relative site attractiveness and other factors such as neighborhood perceptions will have an impact on gaming revenue potential, the single largest driver of AGR is total income within a short drive to a casino. As such, it is not surprising that the Michael Reese site is forecast to be the highest earning given that it has a significantly higher total income within a 15-minute drive than the other sites. Further, the Michael Reese site would make more sense from a casino developer's point of view relative to the other sites given the higher income levels in close proximity.

Separately, it should be pointed out that the Harborside and U.S. Steel sites have the lowest total income by a wide margin when extending the drive time to 30 minutes. These two sites ranked at the bottom in terms of AGR potential.

**Figure 32: Revenue and EBITDA, by site (2024, \$mm)**

	Harborside	Michael Reese	Pershing Road	Roosevelt Road	U.S. Steel Plant
Adjusted Gross Receipts	689.9	805.9	781.6	697.9	652.7
Net Property Revenue	764.3	884.1	859.0	772.5	725.9
EBITDA	2.4	27.1	21.5	2.7	-6.1

*Source: Union Gaming Analytics*

**Figure 33: Summary of population and income at all sites**

	Harborside	Michael Reese	Pershing Road	Roosevelt Road	U.S. Steel Plant
<u>0 to 15 minutes</u>					
Population	494,465	424,960	493,530	553,301	212,242
Per Capita Income	21,260	39,118	28,236	21,691	22,653
Total Income	10,512,325,900	16,623,585,280	13,935,313,080	12,001,651,991	4,807,918,026
<u>0 to 30 minutes</u>					
Population	1,955,781	2,091,209	2,218,361	2,384,519	1,354,586
Per Capita Income	25,480	34,789	33,299	34,747	26,372
Total Income	49,833,299,880	72,751,069,901	73,869,202,939	82,854,881,693	35,723,141,992

*Source: Union Gaming Analytics*

## **Factors that can have an impact on feasibility**

As highlighted herein, the fees and taxes associated with the development of a casino in the City of Chicago are very high relative to the peer group and will have a material impact on the overall return on investment profile of any development. A potential consequence of high fees and taxes will be proposals for casino developments that are not as attractive as more recently developed projects such as Encore Boston Harbor in Massachusetts, or MGM National Harbor in Maryland (with a relatively high gaming tax rate but a de minimis license fee).

### **Casino scope and quality also impacted**

There is a direct relationship between fees/taxes and quality/scope of casino resort development. Higher taxes and fees tend to beget simpler and less attractive casinos with minimal revenue contribution from tourists (e.g. the slots-only casinos in New York City), while lower taxes and fees allow developers to create attractive and large resorts that can, in certain instances, provide material tourism benefits while still allowing for a sufficient return on investment profile. Herein we have highlighted Wynn Resorts' newly opened Encore Boston Harbor, which paid a license fee of \$85 million and pays a gaming tax rate of 25%. With respect to the City of Chicago, the fee structure takes the form of a developer's bid of some amount, in addition to up to \$120 million in fees related to gaming positions (\$30,000 per gaming position and up to 4,000 positions), and another fee equal to 75% of adjusted gross receipts from the highest performing 12-month period within the first three years of operation less the fees already paid on gaming positions. All-in, the one-time fees for a casino in the City of Chicago are likely to exceed \$600 million (exclusive of RFP bid amount), and, when coupled with the progressive tax rate on gaming revenues that results in an effective rate higher than most regional peers, is likely to result in the development of a casino that is not of Las Vegas Strip quality or size. The regulatory environment alone lends itself to the development of a simpler casino with modest amenities rather than a project that would hold significant domestic and international tourism appeal.

### **What if the Chicago privilege tax was not in effect?**

Our analyses suggest that, at best, the highest earning of the five sites would operate on very thin profit margins of around 3%, which compares unfavorably to the in-state peers in the low-to-mid 20% range. In the absence of the privilege tax on AGR specific to Chicago, the profitability of a casino in the City of Chicago would receive a material boost. While not all of the tax "savings" would drop to the bottom line in the event the privilege tax is rescinded, most of it would. In this scenario, and while the casino would certainly allocate some of the savings to, for example, increased marketing efforts, the lack of the privilege tax would allow a casino to operate with margins broadly in line with the in-state peers. For the Michael Reese site, an EBITDA margin in the low 20% range would result in EBITDA of approximately \$200 million in 2024. This, not surprisingly, would change the outlook on feasibility dramatically. Purely from a profit generating standpoint, a casino project that generated EBITDA margins in the 20% range would be attractive to most major casino developers and could result in the introduction of a world-class gaming facility to Chicago. In this case, a casino generating in excess of \$200 million in EBITDA annually would become more attractive to a potential lender – even with the reconciliation fee still in place (discussed in greater detail below).

### **License fees**

Highlighted in the table below is a series of precedent license fees expressed as a multiple of EBITDA. This series suggests that the median license fee multiple of expected EBITDA was 1.1x at the time the fee was issued, and 1.0x based on most currently available operating results. Put another way, the median license fee paid globally has approximated just one year of EBITDA (a proxy for profitability). There are many examples of feasible casino projects on this list, but it is important to note that feasibility can generally be achieved via a high tax rate and low license fee, or a low tax rate and a high license fee. The concept of a high tax rate and a high license fee is likely to result in a lack of interest on the part of casino developers.

**Figure 34: Precedent license fee multiples**

(\$USD mm)	License Fee	(A): Est. EBITDA (at the time of issuance)	(B): Est. EBITDA (current where available)	License Fee / est. EBITDA (A) (x)	License Fee / est. EBITDA (B) (x)
Illinois (Rivers Casino)	\$125	\$86	\$86	1.5X	1.5X
Indiana (Hoosier Park)	\$250	\$40	\$72	6.3X	3.5X
Indiana (Indiana Grand)	\$250	\$65	\$116	3.8X	2.1X
Kansas (Boothill)	\$25	\$11	\$11	2.3X	2.3X
Kansas (Hollywood)	\$25	\$20	\$20	1.3X	1.3X
Kansas (Kansas Star)	\$25	\$50	\$50	0.5X	0.5X
Macau (Sale of Melco Subconcession)	\$900	\$838	\$981	1.1X	0.9X
Macau (Sale of MGM Subconcession)	\$200	\$500	\$556	0.4X	0.4X
Maryland (Baltimore)	\$15	\$14	\$14	1.1X	1.1X
Maryland (Hollywood Perryville)	\$9	\$15	\$15	0.6X	0.6X
Maryland (Maryland Live!)	\$29	\$78	\$78	0.4X	0.4X
Maryland (National Harbor)	\$22	\$190	\$190	0.1X	0.1X
Maryland (Ocean Downs)	\$5	\$7	\$7	0.7X	0.7X
Massachusetts (MGM Springfield)	\$85	\$140	\$100	0.6X	0.9X
Massachusetts (PENN Plainridge)	\$25	\$40	\$40	0.6X	0.6X
Massachusetts (WYNN Boston)	\$85	\$220	\$220	0.4X	0.4X
New York (Lago)	\$50	\$70	\$70	0.7X	0.7X
New York (Montreign)	\$50	\$75	\$75	0.7X	0.7X
New York (Resorts World NY)	\$380	\$100	\$90	3.8X	4.2X
New York (Rivers)	\$50	\$65	\$65	0.8X	0.8X
New York (Tigra Downs)	\$35	\$28	\$28	1.3X	1.3X
Ohio (Belterra Park)	\$50	\$16	\$16	3.1X	3.1X
Ohio (Hard Rock Cleveland)	\$50	\$51	\$51	1.0X	1.0X
Ohio (Hollywood Columbus)	\$50	\$61	\$61	0.8X	0.8X
Ohio (Hollywood Dayton)	\$50	\$21	\$21	2.4X	2.4X
Ohio (Hollywood Toledo)	\$50	\$58	\$58	0.9X	0.9X
Ohio (Horseshoe Cincinnati)	\$50	\$48	\$48	1.0X	1.0X
Ohio (Horseshoe Cleveland)	\$50	\$53	\$53	0.9X	0.9X
Ohio (Mahoning)	\$50	\$26	\$26	1.9X	1.9X
Ohio (Miami Valley)	\$50	\$15	\$15	3.3X	3.3X
Ohio (Scioto Downs)	\$50	\$36	\$36	1.4X	1.4X
Ohio (Thistledown)	\$50	\$27	\$27	1.9X	1.9X
Pennsylvania (Harrah's)	\$66	\$58	\$58	1.1X	1.1X
Pennsylvania (Meadows)	\$66	\$46	\$55	1.4X	1.2X
Pennsylvania (Mohegan)	\$66	\$48	\$54	1.4X	1.2X
Pennsylvania (Mount Airy)	\$66	\$38	\$42	1.7X	1.6X
Pennsylvania (Parx)	\$66	\$108	\$129	0.6X	0.5X
Pennsylvania (Penn National Race Course)	\$66	\$63	\$63	1.1X	1.1X
Pennsylvania (Philly Live!)	\$66	\$70		0.9X	
Pennsylvania (Presque Isle)	\$66	\$18	\$28	3.7X	2.3X
Pennsylvania (Rivers)	\$66	\$64	\$76	1.0X	0.9X
Pennsylvania (Sands Bethlehem)	\$66	\$124	\$135	0.5X	0.5X
Pennsylvania (SugarHouse)	\$66	\$59	\$66	1.1X	1.0X
Pennsylvania (Valley Forge)	\$66	\$24	\$27	2.8X	2.4X
Singapore (Marina Bay)	\$876	\$540	\$1,724	1.6X	0.5X
Singapore (Sentosa Island)	\$442	\$300	\$915	1.5X	0.5X
Mean:				1.5X	1.3X
Weighted Mean:				1.8X	1.3X
Median:				1.1X	1.0X

Source: Union Gaming Analytics, company data

With respect to a casino in the City of Chicago, and ignoring whatever funds might be expended in terms of a developer's bid amount, the license fee structure is rather onerous relative to the precedent set. For example, if we look at the highest performing of the five sites selected by the City of Chicago, and when considering the reconciliation payment, the fees related to licensing (excluding fees for application, license issuance, and background checks) would equate to:

- \$15 million license reconciliation fee
- \$120 million in per position fees (4,000 positions x \$30,000 per position) under the assumption all 4,000 positions are utilized
- \$502.6 million reconciliation payment
- TOTAL \$637.6 million (or \$622.6 million if the initial \$15 million license reconciliation fee can also be offset similar to the \$120 million in position fees)

Total license-related fees of \$622.6 million compare to steady-state EBITDA of \$27.1 million, or a multiple of 23.0x. The implied license fee multiple is therefore roughly 21 times higher than the precedent set and, would be higher still when contemplating any additional bid amount. Put another way, the casino would owe the equivalent of approximately 20 years of profits just to cover the license-related reconciliation fees. A high license fee, when combined with a tax rate that is not as competitive as the regional peers, is more than likely to result in the development of a casino that is of more modest quality and size relative to, for example, Encore Boston Harbor, which we view as the premier urban resort casino.

## Section 2, Ability to finance a casino

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Section 2 addresses the ability of a casino to obtain necessary funding and the structure of said funding. The analyses herein contemplate the following factors:

1. Land acquisition costs
2. Construction costs
3. Project management costs
4. Applicable taxes and fees
5. Requirements of Public Act 101-31, including additional license fees, position fees, reconciliation payment, and an assumed bid amount
6. The expansion of competitive gaming establishments as per Public Act 101-31
7. Initial casino operation costs
8. Greenfield development financing and comparable capital markets financings

The above factors, overlaid on top of revenue and EBITDA forecasts for each site, in addition to other forecasts on such items as operating expenses, result in multi-year financial projections for each. Noted herein, all five sites have a subpar, or even negative return on investment and, as such, would not be able to obtain traditional financing for various reasons.

Current market trends would generally suggest the following financing requirements and details for an already well-known gaming company with a sound balance sheet:

- 40% to 50% equity contribution
- Maximum leverage of 5x to 6x steady-state EBITDA
- Interest rate of approximately 9% to 10% for a greenfield development

If a developer were to approach a lender and seek to finance 55% of the project, this would equate to a loan of nearly \$800 million under the highest earning of the five sites. We calculate this loan amount based on expectations of a \$750 million development cost, in addition to the license reconciliation fee and per position fees that would have to be wrapped into a financing package as the casino would not be able to fund these fees out of operating cash flows. However, the annual debt service on this hypothetical loan would notably exceed cash flows (and thus fail the maximum leverage test). Therefore, a lender would not extend financing for this project.

Alternatively, a developer could approach a lender and seek financing while staying within the leverage limit of 5x. Based on EBITDA of approximately \$27 million (under the highest grossing site), the developer could seek no more than \$135 million of debt. This would then require the developer to obtain approximately \$1.3 billion in equity financing. However, this scenario results in a decidedly negative return on equity as cash inflows in the form of profits are vastly outpaced by outflows in the form of development cost, license-related fees, and debt service. This scenario would not make sense from the point of view of an equity investor, and lenders would generally be unwilling to provide financing for a project with such an equity return profile.

## **Revisiting the scenario without a City of Chicago AGR special privilege tax**

In the absence of the special privilege tax on AGR, we estimate the highest grossing of the five sites, Michael Reese, could generate approximately \$200 million in EBITDA annually. Based on this level of EBITDA, we believe such a casino could be financeable, even in the context of the backwards looking reconciliation fee.

Ultimately, in the context of a casino that generates \$200+ million in EBITDA annually, we believe the project could likely be financed under a scenario where up to 60% of the assumed \$750 development cost and initial per position fee of \$120 million is financed. We have further assumed an interest rate of approximately 10%, in addition to various fees incurred in obtaining financing. Under these parameters, a casino should be able to not only satisfy related interest payments, but generate enough cash flows from operation to satisfy the reconciliation fee (payable in years four and five of operation). Concurrently, and under the assumption of a terminal EBITDA multiple of 9x after five years of operation (broadly in line with public equity market regional gaming trading multiples), there would be a sufficient rate of return on the equity contribution to make the project feasible.

## Section 3, Cannibalization of existing IN casinos

Casinos in northern Indiana currently capture a significant portion of their revenues from customers who reside in Illinois. Given the close proximity of these casinos to the Illinois border, it is not uncommon for persons who live in Chicago or the southern suburbs to patronize these casinos in Indiana based on convenience alone. It is from this pool of customers that some amount of AGR can be repatriated back to Illinois by a casino in the City of Chicago.

Based on the five sites selected for the study by the City of Chicago, we estimate that up to \$260 million in AGR will be repatriated back to Illinois. This consists of approximately \$162 million in slot AGR and \$98 million in table games AGR. These estimates also assume a relocation of the Majestic Star Casino to Gary, IN near I-94, just a few miles from the Illinois border. This relocation modestly reduces the amount of projected cannibalization to Indiana's gaming revenue.

Ultimately, it should be expected that not only will the northern Indiana casinos respond to this cannibalization with various marketing tactics designed to recapture any lost AGR to Illinois, but that changes might be enacted to the regulatory construct in Indiana in order to make these casinos more competitive (e.g. adjust gaming tax rates lower, or make casino free play deductible).

**Figure 35: Cannibalization of Indiana gaming revenue**

(in \$mm)	Revenue cannibalized
Slots	(162.1)
Tables	(97.5)
<b>Total</b>	<b>(259.7)</b>

*Source: Union Gaming Analytics*

## Section 4, Tax and fee generation

A casino in the City of Chicago would create significant fee and tax receipts for the City, County, and State. The largest contribution would come in the form of the two AGR taxes, namely the existing casino graduated AGR tax and then the City of Chicago privilege tax that is equal to 1/3<sup>rd</sup> of AGR. In addition to this, we have estimated casino admissions taxes, various sales taxes related to the non-gaming elements of the casino, and other taxes such as the Cook County annual slot machine tax. While we attempted to be as comprehensive as possible, there are other taxes, for example property taxes, which are impossible to quantify today. Based on our 2024 projections for stabilized operations, annual taxes and fees should range between \$482 million and \$598 million depending on site.

**Figure 36: Tax impact of a casino in the City of Chicago**

	2024				
	Harborside	Michael Reese	Pershing Road	Roosevelt Road	U.S. Steel Plant
<b>Taxes (\$mm)</b>					
AGR Tax	246	293	284	251	232
City of Chicago AGR Privilege Tax	230	269	261	233	218
Casino Admissions Tax	15	18	17	15	14
Cook County Slot Machine Tax	4	4	4	4	4
Hotel Tax @17.4%					
To State @6%	2	2	2	2	2
To City @11.4%	4	4	4	4	4
F&B Tax @10.5%	5	5	5	5	5
Amusement Tax @9%	3	4	4	3	3
<b>Total Taxes</b>	<b>509</b>	<b>598</b>	<b>580</b>	<b>517</b>	<b>482</b>

Source: Union Gaming Analytics

In addition, we estimate the following one-time license-related fees to be generated, by site. Note that the reconciliation payment as depicted below subtracts the fee per position but does not subtract the original \$15 million license reconciliation fee.

**Figure 37: One-time fees of a casino in the City of Chicago**

	2024				
	Harborside	Michael Reese	Pershing Road	Roosevelt Road	U.S. Steel Plant
<b>One-Time Fees (\$mm)</b>					
License Application Fee	0.25	0.25	0.25	0.25	0.25
Background Investigation Fee	0.05	0.05	0.05	0.05	0.05
License Issuance Fee	0.25	0.25	0.25	0.25	0.25
License Reconciliation Fee	15	15	15	15	15
Fee Per Position	120	120	120	120	120
Reconciliation Payment (less Fee Per Position)	413	503	484	419	384
<b>Total One-Time Fees</b>	<b>548</b>	<b>638</b>	<b>619</b>	<b>555</b>	<b>520</b>

Source: Union Gaming Analytics

## Section 5, Airport slots

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Public Act 101-31 also allows for some of the 4,000 slots allowed at a casino within the City of Chicago to be allocated to the city's two airports. Given that the Chicago metro area is already well penetrated in terms of gaming positions, a casino within the City of Chicago is unlikely to need all 4,000 slot machines to achieve optimal revenues. As such, greater total revenues and taxes would be achieved by allocating a few hundred slot machines to Midway and O'Hare airports.

Airports in Nevada provide a proxy for the potential performance of slot machines at Midway and O'Hare. It is expected that slot machines at airports in Chicago would be used similarly to those in Nevada, namely as an option for some travelers to pass time. Although data is not available for airport slot machine performance, we believe revenue per machine is well below the statewide average (approximately \$151 per machine per day for the 12-month period ending May 31, 2019). Nevada's two largest airports, McCarran (Las Vegas) and Reno Tahoe (Reno) currently operate 1,475 and 240 slot machines, respectively, or approximately 1 slot machine per 15,700 arriving passengers.

Ultimately, slot machines at Chicago airports should perform notably better than those in Nevada's airports. Slot machines at Nevada airports garner low utilization rates and low revenues as 1) visitors to Las Vegas upon arriving tend not to play slot machines upon arriving as the ultimate destination of arriving passengers is typically a full-fledged casino with more attractive gaming options; 2) departing passengers from Las Vegas typically have already exhausted their gaming budgets, and 3) local residents using the airport have more convenient gaming options available to them. With respect to Chicago, slot machines at airports should hold greater appeal to these same three categories, especially when contemplating departing and/or connecting passengers – both domestic and international – as they are a captive audience.

We estimate there will be 500 slots available that could be deployed at O'Hare and Midway airports. We have assumed a win per day on these slots of \$200, which compares favorably to Nevada, which is the only comparable market that also has slot machines within airports. Based on an assumed win per day of \$200, AGR at the airports could reach \$37 million.

## **About Union Gaming**

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Union Gaming is the leading boutique investment bank and advisory firm focused exclusively on the global gaming industry. We offer traditional investment banking services to a wide range of clients globally, and through our thought leadership businesses, we advise and support institutional investors, governments and industry stakeholders.